

Fluor Hanford, Inc.  
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0060067

**FLUOR**

**Memorandum**

To: S. J. Trent Date: T4180-03-SLF-006  
From: S. L. Fitzgerald, Manager *S. L. Fitzgerald* Telephone: 373-7495  
WSCF Analytical Services

cc: W/Attachments W/O Attachments  
T. F. Dale S3-28 C. M. Caprio S3-30  
S. L. Fitzgerald S3-30 D. L. Renberger S3-30  
H. K. Meznarich S3-30 L. C. Swanson E6-35  
J. E. Trechter S3-30 File/LB  
M. Neely S3-30

Subject: FINAL RESULTS FOR 200-PW-2/200-PW-4 OU- BOREHOLE SOIL SAMPLING-  
SAMPLE DELIVERY GROUP **(WSCF20030598)** SAF NUMBER F03-006

References: (1) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEN-001,  
October 31, 2002  
(2) HNF-SD-CD-QAPP-017, Rev. 5, Waste Sampling and Characterization Facility  
Quality Assurance Plan

This letter contains a narrative (Attachment 1) for the sample delivery group (WSCF20030598),  
the analytical results (Attachment 2) and the sample receipt information (Attachment 3).

slf/ddw

Attachments 3



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**T4180-03-SLF-006**

**ATTACHMENT 1**

**NARRATIVE**

Consisting of 3 pages  
Cover page not included

<b>Sample Delivery Group</b>	<b>WSCF20030598</b>
<b>Sample Matrix</b>	<b>Soil</b>
<b>Sample Visual</b>	<b>Brown</b>
<b>SAF Number</b>	<b>F03-006</b>
<b>Data Deliverable</b>	<b>Summary Report</b>

### Introduction

Three (3) soil samples (B16W96, B16W97 and B16W98) from the GPP were received at the WSCF Laboratory on April 29, 2003. The sample was analyzed for those analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Protection Program- Letter of Instruction*, referenced in the cover letter.

The narrative (Attachment 1) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 2) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information. Copies of the chain of custody and Request for Sample Analysis forms are included as Attachment 3.

### Analytical Methodology for Requested Analyses

- PCB's by EPA SW-846 Method 8082. Analytical work was performed with no deviations to the approved method.
- ICP-MS Metals by EPA Method 200.8 and ICP-AES Metals by EPA SW-846 Method 6010A. Analytical work was performed with no deviations to the approved method.
- VOA's by EPA SW-846 Method 8260A. Analytical work was performed with no deviations to the approved method. The compound 1-Butanol requested under EPA SW-846 Method 8015 was reported under this method.
- Semi-VOA's by EPA SW-846 Method 8270B. Analytical work was performed with no deviations to the approved method.
- Alcohols and Glycols by EPA SW-846 Method 8015. Analytical work was performed with no deviations to the approved method. The compound 1-Butanol requested under this method was reported under EPA SW-846 Method 8260A.
- WTPH-D by WDOE Method NWTPH-Dx. Analytical work was performed with no deviations to the approved method.
- WTPH-G by WDOE Method NWTPH-Gx. Analytical work was performed with no deviations to the approved method.

- IC Anions and Ammonium by EPA SW-846 Method 300.0 and 300.7. Analytical work was performed with no deviations to the approved method for Ammonium, but a deviation was required for the Anions (see comments below).
- The pH by EPA Method 150.1. Analytical work was performed with no deviations to the approved method.
- Percent Solids by EPA Method 160.3. Analytical work was performed with no deviations to the approved method.
- Cyanide by EPA SW-846 Method 9010. Analytical work was performed with no deviations to the approved method.
- All RadChem analyses (TA/TB, AEA's, GEA) were run by internal WDOE accredited WSCF procedures. Analytical work was performed with no deviations to the approved method.

### Comments

PCB's – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-52 for QC details.

ICP-MS and ICP-AES Metals – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-34, 2-35, 2-36, 2-37, 2-38, 2-39, 2-40, 2-41 and 2-60 for QC details.

VOA's – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-53, 2-54 and 2-55 for QC details. Compounds listed on the tentatively identified peak report with an "N" qualifier have been identified with the program used to interpret the raw data.

Semi-VOA's – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-56, 2-57, 2-58 and 2-59 for QC details. Compounds listed on the tentatively identified peak report with an "N" qualifier have been identified with the program used to interpret the raw data.

Alcohols and Glycols – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-50 for QC details.

WTPH-D – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-51 for details.

WTPH-G – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-47 for details.

IC Anions – The client requested hold time(s) for this analysis was not met. The client was notified and requested WSCF to continue with this analysis. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-42 and 2-43 for QC details.

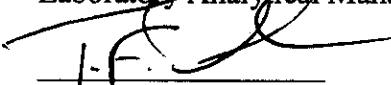
NH4 – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-44 for QC details.

Percent Solids – PCB's, VOA's, Semi-VOA's, Alcohols and Glycols, WTPH-G and WTPH-D analytical results were corrected for percent solids. All other analytical results were reported for the sample as received.

CN – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-46 for QC details.

RadChem – There are no hold times associated with these WDOE accredited methods. Except for GEA, a Laboratory Control Sample and Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-45, 2-48, and 2-49 for QC details.

This Summary Report is in compliance with the SOW, both technically and for completeness. Release of the data contained in this hard copy report has been authorized by the WSCF Laboratory Analytical Manager and Client Services, as verified by the following signature.



Troy Dale  
WSCF Production Control

#### Abbreviations

Hg – mercury  
IC – ion chromatography  
ICP – inductively coupled plasma  
ICP/AES – ICP/atomic emission spectroscopy  
ICP/MS – ICP/mass spectrometry  
Total U – total uranium  
AT/TB – total alpha/total beta  
AEA – Alpha Energy Analysis  
WTPH-G – Total Hydrocarbons-Gasoline

Am – americium  
Cm - curium  
Pu – plutonium  
Np – neptunium  
GEA – gamma energy analysis  
H3 – Tritium  
Sr – Strontium 89, 90  
WTPH-D – Total Hydrocarbons-Diesel  
TSS – Total Suspended Solids

**T4180-03-SLF-006**

**ATTACHMENT 2**

**ANALYTICAL RESULTS**

Consisting of 60 pages  
Cover page not included

**WSCF  
ANALYTICAL RESULTS REPORT**

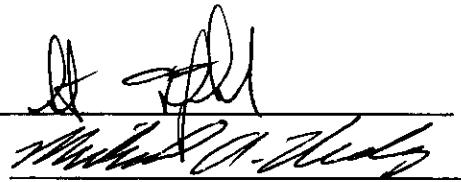
for

**Ground Water Protection Program**

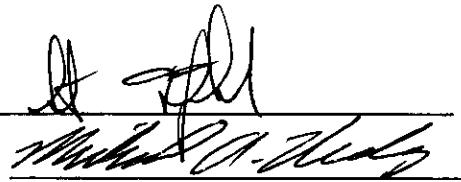
**Richland, WA 99352**

**Attention: Steve Trent**

Analytical:



Client Services:



Contract#: F03-006

Report#: WSCF20030598

Report Date: 30-may-2003

Report W004/ver. 5.1

*Ground Water Protection Program*

**WSCF**  
**ANALYTICAL RESULTS REPORT**

2 - 1

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample Receive	
W030000246	B16W96	TRENT	7664-41-7	Ammonia (N) by IC	SOLID	LA-503-401	U	< 0.200	ug/g	50.00	0.20	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	57-12-5	Cyanide by Midi/Spectrophotom	SOLID	LA-695-402	U	< 0.200	mg/kg		0.20	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	TS	Percent Solids	SOLID	LA-519-412		97.6	%		0.0	05/30/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	PH	pH Soil and Waste Measurement	SOLID	LA-212-411		8.88	pH		0.010	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	540-51-2	2-Bromoethanol	SOLID	Organics		1.20e+04	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	60-29-7	Diethyl ether	SOLID	Organics	U	< 5.00e+03	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	107-21-1	Ethylene glycol	SOLID	Organics	U	< 5.00e+03	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	67-56-1	Methanol	SOLID	Organics	U	< 1.00e+03	ug/kg		1.0e+03	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14596-10-2	Am-241 by AEA	SOLID	LA-508-471	U	-5.50e-03	pCi/g		0.050	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E,T,C	Am-241 by AEA Total Cntg Error	SOLID	LA-508-471		490	%		0.0	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	24959-67-9	Bromide (Br) by IC	SOLID	LA-533-410	U	< 2.25	ug/g	50.00	2.2	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	16887-00-6	Chloride (Cl) by IC	SOLID	LA-533-410	U	< 0.700	ug/g	50.00	0.70	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	16984-48-8	Fluoride (F) by IC	SOLID	LA-533-410		1.13	ug/g	50.00	0.35	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	N03-N	Nitrate (N) by IC	SOLID	LA-533-410		4.36	ug/g	50.00	0.25	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	N02-N	Nitrite (N) by IC	SOLID	LA-533-410	U	< 0.450	ug/g	50.00	0.45	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14265-44-2	Phosphate (P) by IC	SOLID	LA-533-410	U	< 0.650	ug/g	50.00	0.65	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14808-79-8	Sulfate (SO4) by IC	SOLID	LA-533-410		2.62	ug/g	50.00	1.2	05/16/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E,T,C	Ac-228 Rel.% Count Error (GEA)	SOLID	LA-508-462		15.3	%		0.0	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14331-83-0	Ac-228 by GEA	SOLID	LA-508-462		0.480	pCi/g		0.027	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E,T,C	Am-241 Rel.% Count Error (GEA)	SOLID	LA-508-462		368	%		0.0	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14596-10-2	Am-241 by GEA	SOLID	LA-508-462	U	-0.0115	pCi/g		0.068	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E,T,C	Bi-212 Rel.% Count Error (GEA)	SOLID	LA-508-462		23.9	%		0.0	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14913-49-6	Bi-212 by GEA	SOLID	LA-508-462		0.321	pCi/g		0.060	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E,T,C	Bi-214 Rel.% Count Error (GEA)	SOLID	LA-508-462		14.2	%		0.0	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14733-03-0	Bi-214 by GEA	SOLID	LA-508-462		0.341	pCi/g		0.016	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E,T,C	Ce-144 Rel.% Count Error (GEA)	SOLID	LA-508-462	U	579	%		0.0	05/01/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	14762-78-8	Ce-144 by GEA	SOLID	LA-508-462	U	8.28e-03	pCi/g		0.072	05/01/03 04/29/03 04/29/03

**MDL=Minimum Detection Limit**

B - The analyte < the RDL but > = the iDL/MDL (inorganic)

E - Analyte is an estimate, has potentially larger errors

**RQ=Result Qualifier**

U - Analyzed for but not detected above limiting criteria.

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

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**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive		
					Method	RQ							
W030000246	B16W96	TRENT	E.T.C	Co-60 Rel. % Count Error (GEA)	SOLID	LA-508-462	267	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	10198-40-0	Co-60 by GEA	SOLID	LA-508-462	U	1.73e-03	pCi/g	8.2e-03	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Cs-134 Rel. % Count Error (GEA)	SOLID	LA-508-462	44.8	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	13967-70-9	Cs-134 by GEA	SOLID	LA-508-462	U	0.0149	pCi/g	0.010	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Cs-137 Rel. % Count Error (GEA)	SOLID	LA-508-462	272	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	10045-97-3	Cs-137 by GEA	SOLID	LA-508-462	U	1.96e-03	pCi/g	8.1e-03	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Eu-152 Rel. % Count Error (GEA)	SOLID	LA-508-462	100	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	14683-23-9	Eu-152 by GEA	SOLID	LA-508-462	U	-0.0194	pCi/g	0.025	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Eu-154 Rel. % Count Error (GEA)	SOLID	LA-508-462	89.2	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	15585-10-1	Eu-154 by GEA	SOLID	LA-508-462	U	0.0179	pCi/g	0.026	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Eu-155 Rel. % Count Error (GEA)	SOLID	LA-508-462	83.1	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	14391-16-3	Eu-155 by GEA	SOLID	LA-508-462	0.0425	pCi/g	0.038	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	E.T.C	Nb-94 Rel. % Count Error (GEA)	SOLID	LA-508-462	163	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	14681-63-1	Nb-94 by GEA	SOLID	LA-508-462	U	2.78e-03	pCi/g	7.8e-03	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Pb-212 Rel. % Count Error (GEA)	SOLID	LA-508-462	12.5	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	15092-94-1	Pb-212 by GEA	SOLID	LA-508-462	0.490	pCi/g	0.017	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	E.T.C	Pb-214 Rel. % Count Error (GEA)	SOLID	LA-508-462	15.1	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	15067-28-4	Pb-214 by GEA	SOLID	LA-508-462	0.400	pCi/g	0.018	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	E.T.C	Ra-226 Rel. % Count Error (GEA)	SOLID	LA-508-462	14.2	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	13982-63-3	Ra-226 by GEA	SOLID	LA-508-462	0.341	pCi/g	0.016	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	E.T.C	Ra-228 Rel. % Count Error (GEA)	SOLID	LA-508-462	15.3	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	15262-20-1	Ra-228 by GEA	SOLID	LA-508-462	0.480	pCi/g	0.027	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	E.T.C	Ru-103 Rel. % Count Error (GEA)	SOLID	LA-508-462	262	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	13968-53-1	Ru-103 by GEA	SOLID	LA-508-462	U	-1.73e-03	pCi/g	7.7e-03	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Ru-106 Rel. % Count Error (GEA)	SOLID	LA-508-462	398	%	0.0	05/01/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	13967-48-1	Ru-106 by GEA	SOLID	LA-508-462	U	0.0107	pCi/g	0.073	05/01/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	Sb-125 Rel. % Count Error (GEA)	SOLID	LA-508-462	134	%	0.0	05/01/03	04/29/03	04/29/03	

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B - The analyte < the RDL but > = the IDL/MDL (inorganic)

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**RQ=Result Qualifier**

U - Analyzed for but not detected above limiting criteria.

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample Receive	
W030000246	B16W96	TRENT	14234-35-6	Sb-125 by GEA	SOLID	LA-508-462	U	0.0102	pCi/g	0.023	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	E,T,C	Sn-113 Rel. % Count Error (GEA)	SOLID	LA-508-462		538	%	0.0	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	13966-06-8	Sn-113 by GEA	SOLID	LA-508-462	U	-1.21e-03	pCi/g	0.011	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	E,T,C	Sn-126 Rel. % Count Error (GEA)	SOLID	LA-508-462		25.9	%	0.0	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	15832-50-5	Sn-126 by GEA	SOLID	LA-508-462	U	0.115	pCi/g	0.12	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	E,T,C	Th-234 Rel. % Count Error (GEA)	SOLID	LA-508-462		26.6	%	0.0	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	15065-10-8	Th-234 by GEA	SOLID	LA-508-462		0.669	pCi/g	0.56	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	E,T,C	Tl-208 Rel. % Count Error (GEA)	SOLID	LA-508-462		14.4	%	0.0	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	14913-50-9	Tl-208 by GEA	SOLID	LA-508-462		0.143	pCi/g	8.0e-03	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	E,T,C	U-235 Rel. % Count Error (GEA)	SOLID	LA-508-462		119	%	0.0	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	15117-96-1	U-235 by GEA	SOLID	LA-508-462	U	0.0409	pCi/g	0.072	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	E,T,C	Zn-65 Rel. % Count Error (GEA)	SOLID	LA-508-462		145	%	0.0	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	13982-39-3	Zn-65 by GEA	SOLID	LA-508-462	U	-8.92e-03	pCi/g	0.018	05/01/03 04/29/03 04/29/03	
W030000246	B16W96	TRENT	7440-69-9	Bismuth by ICP	SOLID	LA-505-411	U	< 9.18	ug/g	91.76	9.2	05/28/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-50-8	Boron by ICP	SOLID	LA-505-411	U	< 9.360	ug/g	91.76	9.360	05/28/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7429-90-5	Aluminum by ICP-MS	SOLID	LA-505-412	E	7.26e+03	ug/g	4.66	51	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-36-0	Antimony by ICP-MS	SOLID	LA-505-412	U	< 2.33	ug/g	4.66	2.3	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-38-2	Arsenic by ICP-MS	SOLID	LA-505-412		1.66	ug/g	4.66	1.4	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-39-3	Barium by ICP-MS	SOLID	LA-505-412		102	ug/g	4.66	0.93	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-41-7	Beryllium by ICP-MS	SOLID	LA-505-412	U	< 1.40	ug/g	4.66	1.4	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-43-8	Cadmium by ICP-MS	SOLID	LA-505-412	U	< 0.466	ug/g	4.66	0.47	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-47-3	Chromium by ICP-MS	SOLID	LA-505-412		6.28	ug/g	4.66	1.4	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-48-4	Cobalt by ICP-MS	SOLID	LA-505-412		11.9	ug/g	4.66	0.93	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-50-8	Copper by ICP-MS	SOLID	LA-505-412		14.0	ug/g	4.66	2.3	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7439-92-1	Lead by ICP-MS	SOLID	LA-505-412	U	< 5.59	ug/g	4.66	5.6	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7439-96-5	Manganese by ICP-MS	SOLID	LA-505-412		480	ug/g	4.66	1.4	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7439-97-6	Mercury by ICP-MS	SOLID	LA-505-412	U	< 0.466	ug/g	4.66	0.47	05/08/03 04/29/03 04/29/03

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*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		DF	MDL	Analyze Sample	Receive		
					Method	RQ						
W030000246	B16W96	TRENT	7439-98-7	Molybdenum by ICP-MS	SOLID	LA-505-412	U	< 1.40	ug/g	4.66	1.4	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-02-0	Nickel by ICP-MS	SOLID	LA-505-412		9.80	ug/g	4.66	2.3	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7782-49-2	Selenium by ICP-MS	SOLID	LA-505-412	U	< 1.40	ug/g	4.66	1.4	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-22-4	Silver by ICP-MS	SOLID	LA-505-412	U	< 0.932	ug/g	4.66	0.93	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-28-0	Thallium by ICP-MS	SOLID	LA-505-412	U	< 0.466	ug/g	4.66	0.47	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-29-1	Thorium by ICP-MS	SOLID	LA-505-412		2.16	ug/g	4.66	0.93	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-61-1	Uranium by ICP-MS	SOLID	LA-505-412	U	< 0.466	ug/g	4.66	0.47	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-62-2	Vanadium by ICP-MS	SOLID	LA-505-412		98.3	ug/g	4.66	1.9	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7440-66-6	Zinc by ICP-MS	SOLID	LA-505-412		56.5	ug/g	4.66	19	05/08/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	TPH-G	Total Pet. Hydrocarbons Gas	SOLID	NWTPH	U	< 100	ug/kg		1.0e+02	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	12674-11-2	Aroclor-1016	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	11104-28-2	Aroclor-1221	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	11141-16-5	Aroclor-1232	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	53469-21-9	Aroclor-1242	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	12672-29-6	Aroclor-1248	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	11097-69-1	Aroclor-1254	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	11096-82-5	Aroclor-1260	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	37324-23-5	Aroclor-1262	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	11100-14-4	Aroclor-1268	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	13981-16-3	Pu-238 by AEA	SOLID	LA-508-471	U	-8.60e-03	pCi/g		0.069	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E.T.C	Pu-238 by AEA Total Cntg Error	SOLID	LA-508-471		442	%		0.0	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	E.T.C	Pu-239/240 AEA Total Cntg Err	SOLID	LA-508-471		1.00e+03	%		0.0	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	PU-239/240	Pu-239/240 by AEA	SOLID	LA-508-471	U	2.20e-03	pCi/g		0.020	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	120-82-1	1,2,4-Trichlorobenzene	SOLID	LA-523-456	U	< 300	ug/kg	1.00	3.0e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	95-60-1	1,2-Dichlorobenzene (SV)	SOLID	LA-523-456	U	< 370	ug/kg	1.00	3.7e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	541-73-1	1,3-Dichlorobenzene	SOLID	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	106-46-7	1,4-Dichlorobenzene (SV)	SOLID	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	05/20/03 04/29/03 04/29/03

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**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

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**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000246	B16W96	TRENT	95-95-4	2,4,5-Trichlorophenol	SOLID	LA-523-456	U	< 75.0	ug/kg	1.00	75	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	88-06-2	2,4,6-Trichlorophenol	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	120-83-2	2,4-Dichlorophenol	SOLID	LA-523-456	U	< 82.0	ug/kg	1.00	82	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	105-67-9	2,4-Dimethylphenol	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	51-28-5	2,4-Dinitrophenol	SOLID	LA-523-456	U	< 680	ug/kg	1.00	6.8e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	121-14-2	2,4-Dinitrotoluene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	606-20-2	2,6-Dinitrotoluene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	111-76-2	2-Butoxyethanol	SOLID	LA-523-456	U	< 100	ug/kg	1.00	1.0e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	91-58-7	2-Chloronaphthalene	SOLID	LA-523-456	U	< 82.0	ug/kg	1.00	82	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	95-57-8	2-Chlorophenol	SOLID	LA-523-456	U	< 150	ug/kg	1.00	1.5e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	91-57-8	2-Methylnaphthalene	SOLID	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	95-48-7	2-Methylphenol	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	88-74-4	2-Nitroaniline	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	88-75-5	2-Nitrophenol	SOLID	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	108-39-4	3 & 4 Methylphenol Total	SOLID	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	91-94-1	3,3'-Dichlorobenzidine	SOLID	LA-523-456	U	< 82.0	ug/kg	1.00	82	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	99-09-2	3-Nitroaniline	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	SOLID	LA-523-456	U	< 680	ug/kg	1.00	6.8e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	101-55-3	4-Bromophenyl-phenylether	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	59-50-7	4-Chloro-3-methylphenol	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	106-47-8	4-Chloroaniline	SOLID	LA-523-456	U	< 95.0	ug/kg	1.00	95	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	7005-72-3	4-Chlorophenyl-phenylether	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	100-01-6	4-Nitroaniline	SOLID	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	100-02-7	4-Nitrophenol	SOLID	LA-523-456	U	< 660	ug/kg	1.00	6.6e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	83-32-9	Acenaphthene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	208-96-8	Acenaphthylene	SOLID	LA-523-456	U	< 82.0	ug/kg	1.00	82	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	120-12-7	Anthracene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03

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**Report W004/ver. 5.1**

**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	WSCF							Analyze Sample	Receive
				Matrix	Method	RQ	Result	Unit	DF	MDL		
W030000246	B16W96	TRENT	56-55-3	Benzo(a)anthracene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	50-32-8	Benzo(a)pyrene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	205-99-2	Benzo(b)fluoranthene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	191-24-2	Benzo(g,h,i)perylene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	207-08-9	Benzo(k)fluoranthene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	100-51-6	Benzyl alcohol	SOLID	LA-523-456	U	< 75.0	ug/kg	1.00	75	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	117-81-7	Bis (2-Ethylhexyl) phthalate	SOLID	LA-523-456		690	ug/kg	1.00	5.7e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	108-60-1	Bis(2-Chloro-1-methylene)	SOLID	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	85-68-7	Butylbenzylphthalate	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	86-74-8	Carbazole	SOLID	LA-523-456	U	< 82.0	ug/kg	1.00	82	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	218-01-9	Chrysene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	84-74-2	Di-n-butylphthalate	SOLID	LA-523-456	U	< 88.0	ug/kg	1.00	88	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	117-84-0	Di-n-octylphthalate	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	53-70-3	Dibenz(a,h)anthracene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	132-64-9	Dibenzofuran	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	84-66-2	Diethylphthalate	SOLID	LA-523-456	U	< 190	ug/kg	1.00	1.9e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	131-11-3	Dimethylphthalate	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	206-44-0	Fluoranthene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	86-73-7	Fluorene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	118-74-1	Hexachlorobenzene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	87-68-3	Hexachlorobutadiene	SOLID	LA-523-456	U	< 370	ug/kg	1.00	3.7e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	77-47-4	Hexachlorocyclopentadiene	SOLID	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	67-72-1	Hexachloroethane	SOLID	LA-523-456	U	< 480	ug/kg	1.00	4.8e+02	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	78-59-1	Isophorone	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	621-64-7	N-Nitroso-di-n-propylamine	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	86-30-6	N-Nitrosodiphenylamine	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03 04/29/03 04/29/03

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**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF Method</b>	<b>RQ</b>	<b>Result</b>	<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample Receive</b>			
											05/20/03	04/29/03	04/29/03	
W030000246	B16W96	TRENT	91-20-3	Naphthalene	SOLID	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	98-95-3	Nitrobenzene	SOLID	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	87-86-5	Pentachlorophenol	SOLID	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	85-01-8	Phenanthrene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	108-95-2	Phenol	SOLID	LA-523-456	U	< 100	ug/kg	1.00	1.0e+02	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	129-00-0	Pyrene	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	126-73-8	Tri-n-butylphosphate	SOLID	LA-523-456	U	< 68.0	ug/kg	1.00	68	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	111-44-4	bis(-2-Chloroethyl)Eth	SOLID	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	111-91-1	bis(2-Chloroethyl)methane	SOLID	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	13966-29-5	U-234 by AEA	SOLID	LA-508-471		0.110	pCi/g		0.016	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	U-234 by AEA Total Cntg Error	SOLID	LA-508-471		31.0	%		0.0	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	15117-96-1	U-235 by AEA	SOLID	LA-508-471		0.0130	pCi/g		5.1e-03	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	U-235 by AEA Total Cntg Error	SOLID	LA-508-471		78.0	%		0.0	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	24678-82-8	U-238 by AEA	SOLID	LA-508-471		0.140	pCi/g		4.7e-03	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	E.T.C	U-238 by AEA Total Cntg Error	SOLID	LA-508-471		29.0	%		0.10	05/20/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	71-55-6	1,1,1-Trichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	79-00-5	1,1,2-Trichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	75-34-3	1,1-Dichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	75-35-4	1,1-Dichloroethene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	107-06-2	1,2-Dichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	540-59-0	1,2-Dichloroethene (cis & tran)	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	78-87-5	1,2-Dichloropropane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	71-36-3	1-Butanol	SOLID	LA-523-455	U	< 19.0	ug/kg	1.00	19	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	78-93-3	2-Butanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	591-78-6	2-Hexanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03
W030000246	B16W96	TRENT	107-87-9	2-Pentanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03	04/29/03	04/29/03

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*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

Attention: Steve Trent  
 Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample Receive	
W030000246	B16W96	TRENT	108-10-1	4-Methyl-2-pentanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	67-64-1	Acetone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	71-43-2	Benzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	75-27-4	Bromodichloromethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	75-26-2	Bromoform	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	74-83-9	Bromomethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	75-15-0	Carbon Disulfide	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	56-23-5	Carbon Tetrachloride	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	108-90-7	Chlorobenzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	75-00-3	Chloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	67-66-3	Chloroform	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	74-87-3	Chloromethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	124-48-1	Dibromo-chloromethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	100-41-4	Ethylbenzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	75-09-2	Methylene Chloride	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	100-42-5	Styrene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	127-18-4	Tetrachloroethene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	108-88-3	Toluene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	1330-20-7	Total Xylenes	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	79-01-6	Trichloroethene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	75-01-4	Vinyl Chloride	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	10061-01-5	cis-1,3-Dichloropropene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	104-51-8	n-Butylbenzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	10061-02-6	trans-1,3-Dichloropropene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	8008-20-6	Kerosene	SOLID	NWTPH	U	< 4.10e+03	ug/kg	1.00	4.1e+03	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	68476-34-6	Total Pet. Hydrocarbons Diesel	SOLID	NWTPH	U	< 4.10e+03	ug/kg	1.00	4.1e+03	05/21/03 04/29/03 04/29/03
W030000246	B16W96	TRENT	84-15-1	ortho-Terphenyl	SOLID	NWTPH		1.80e+04	ug/kg	1.00	2.0e+02	05/21/03 04/29/03 04/29/03

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Ground Water Protection Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample	Receive
W030000247	B16W97	TRENT	7664-41-7	Ammonia (N) by IC	SOLID	LA-503-401	U	< 0.200	ug/g	50.00	0.20	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	57-12-5	Cyanide by Midi/Spectrophotom	SOLID	LA-695-402	U	< 0.190	mg/kg		0.19	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	TS	Percent Solids	SOLID	LA-519-412		95.6	%		0.0	05/30/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	PH	pH Soil and Waste Measurement	SOLID	LA-212-411		8.73	pH		0.010	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	540-51-2	2-Bromoethanol	SOLID	Organics		1.20e+04	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	60-29-7	Diethyl ether	SOLID	Organics	U	< 5.00e+03	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	107-21-1	Ethylene glycol	SOLID	Organics	U	< 5.00e+03	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	67-56-1	Methanol	SOLID	Organics	U	< 1.00e+03	ug/kg		1.0e+03	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14596-10-2	Am-241 by AEA	SOLID	LA-508-471	U	0.0240	pCi/g		0.046	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Am-241 by AEA Total Cntg Error	SOLID	LA-508-471		120	%		0.0	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	24959-67-9	Bromide (Br) by IC	SOLID	LA-533-410	U	< 2.25	ug/g	50.00	2.2	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	16887-00-6	Chloride (Cl) by IC	SOLID	LA-533-410	U	< 0.700	ug/g	50.00	0.70	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	16984-48-8	Fluoride (F) by IC	SOLID	LA-533-410		1.27	ug/g	50.00	0.35	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	N03-N	Nitrate (N) by IC	SOLID	LA-533-410		11.2	ug/g	50.00	0.25	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	N02-N	Nitrite (N) by IC	SOLID	LA-533-410	U	< 0.450	ug/g	50.00	0.45	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14265-44-2	Phosphate (P) by IC	SOLID	LA-533-410	U	< 0.650	ug/g	50.00	0.65	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14808-79-8	Sulfate (SO4) by IC	SOLID	LA-533-410		5.50	ug/g	50.00	1.2	05/16/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Ac-228 Rel.% Count Error (GEA)	SOLID	LA-508-462		15.7	%		0.0	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14331-83-0	Ac-228 by GEA	SOLID	LA-508-462		0.533	pCi/g		0.035	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Am-241 Rel.% Count Error (GEA)	SOLID	LA-508-462		152	%		0.0	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14596-10-2	Am-241 by GEA	SOLID	LA-508-462	U	-0.0363	pCi/g		0.087	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Bi-212 Rel.% Count Error (GEA)	SOLID	LA-508-462		26.6	%		0.0	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14913-49-6	Bi-212 by GEA	SOLID	LA-508-462		0.369	pCi/g		0.080	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Bi-214 Rel.% Count Error (GEA)	SOLID	LA-508-462		16.0	%		0.0	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14733-03-0	Bi-214 by GEA	SOLID	LA-508-462		0.425	pCi/g		0.020	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Ce-144 Rel.% Count Error (GEA)	SOLID	LA-508-462		150	%		0.0	05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14762-78-8	Ce-144 by GEA	SOLID	LA-508-462	U	-0.0394	pCi/g		0.082	05/01/03 04/29/03 04/29/03

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**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		DF	MDL	Analyze Sample Receive
					Method	RQ			
W030000247	B16W97	TRENT	E.T.C	Co-60 Rel.% Count Error (GEA)	SOLID	LA-508-462	489	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	10198-40-0	Co-60 by GEA	SOLID	LA-508-462 U	1.46e-03	pCi/g	0.010 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Cs-134 Rel.% Count Error (GEA)	SOLID	LA-508-462	56.2	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	13967-70-9	Cs-134 by GEA	SOLID	LA-508-462 U	0.0199	pCi/g	0.014 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Cs-137 Rel.% Count Error (GEA)	SOLID	LA-508-462	181	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	10045-97-3	Cs-137 by GEA	SOLID	LA-508-462 U	4.12e-03	pCi/g	0.011 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Eu-152 Rel.% Count Error (GEA)	SOLID	LA-508-462	550	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14683-23-9	Eu-152 by GEA	SOLID	LA-508-462 U	-4.05e-03	pCi/g	0.031 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Eu-154 Rel.% Count Error (GEA)	SOLID	LA-508-462	100	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	15585-10-1	Eu-154 by GEA	SOLID	LA-508-462 U	-0.0255	pCi/g	0.032 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Eu-155 Rel.% Count Error (GEA)	SOLID	LA-508-462	95.0	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14391-16-3	Eu-155 by GEA	SOLID	LA-508-462	0.0317	pCi/g	0.044 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Nb-94 Rel.% Count Error (GEA)	SOLID	LA-508-462	139	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	14681-63-1	Nb-94 by GEA	SOLID	LA-508-462 U	4.31e-03	pCi/g	0.010 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Pb-212 Rel.% Count Error (GEA)	SOLID	LA-508-462	13.1	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	15092-94-1	Pb-212 by GEA	SOLID	LA-508-462	0.555	pCi/g	0.021 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Pb-214 Rel.% Count Error (GEA)	SOLID	LA-508-462	15.2	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	15067-28-4	Pb-214 by GEA	SOLID	LA-508-462	0.443	pCi/g	0.022 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Ra-226 Rel.% Count Error (GEA)	SOLID	LA-508-462	16.0	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	13982-63-3	Ra-226 by GEA	SOLID	LA-508-462	0.425	pCi/g	0.020 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Ra-228 Rel.% Count Error (GEA)	SOLID	LA-508-462	15.7	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	15262-20-1	Ra-228 by GEA	SOLID	LA-508-462	0.533	pCi/g	0.035 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Ru-103 Rel.% Count Error (GEA)	SOLID	LA-508-462	225	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	13968-53-1	Ru-103 by GEA	SOLID	LA-508-462 U	-2.65e-03	pCi/g	9.9e-03 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Ru-106 Rel.% Count Error (GEA)	SOLID	LA-508-462	1.00e+03	%	0.0 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	13967-48-1	Ru-106 by GEA	SOLID	LA-508-462 U	-2.85e-03	pCi/g	0.089 05/01/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	Sb-125 Rel.% Count Error (GEA)	SOLID	LA-508-462	179	%	0.0 05/01/03 04/29/03 04/29/03

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*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample Receive	
W030000247	B16W97	TRENT	14234-35-6	Sb-125 by GEA	SOLID	LA-508-462	U	9.27e-03	pCi/g	0.028	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	Sn-113 Rel. % Count Error (GEA)	SOLID	LA-508-462		281	%	0.0	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	13966-06-8	Sn-113 by GEA	SOLID	LA-508-462	U	-2.73e-03	pCi/g	0.013	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	Sn-126 Rel. % Count Error (GEA)	SOLID	LA-508-462		31.9	%	0.0	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	15832-50-5	Sn-126 by GEA	SOLID	LA-508-462	U	0.0809	pCi/g	0.081	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	Th-234 Rel. % Count Error (GEA)	SOLID	LA-508-462		31.2	%	0.0	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	15065-10-8	Th-234 by GEA	SOLID	LA-508-462		0.973	pCi/g	0.74	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	Tl-208 Rel. % Count Error (GEA)	SOLID	LA-508-462		15.6	%	0.0	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	14913-50-9	Tl-208 by GEA	SOLID	LA-508-462		0.173	pCi/g	0.010	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	U-235 Rel. % Count Error (GEA)	SOLID	LA-508-462		33.7	%	0.0	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	15117-96-1	U-235 by GEA	SOLID	LA-508-462	U	0.0505	pCi/g	0.086	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	Zn-65 Rel. % Count Error (GEA)	SOLID	LA-508-462		132	%	0.0	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	13982-39-3	Zn-65 by GEA	SOLID	LA-508-462	U	-0.0128	pCi/g	0.023	05/01/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	7440-69-9	Bismuth by ICP	SOLID	LA-505-411	U	< 9.46	ug/g	94.60	9.5	05/28/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-50-8	Boron by ICP	SOLID	LA-505-411	U	< 9.650	ug/g	94.60	9.649	05/28/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7429-90-5	Aluminum by ICP-MS	SOLID	LA-505-412	E	6.93e+03	ug/g	4.62	51	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-36-0	Antimony by ICP-MS	SOLID	LA-505-412	U	< 2.31	ug/g	4.62	2.3	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-38-2	Arsenic by ICP-MS	SOLID	LA-505-412	U	< 1.39	ug/g	4.62	1.4	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-39-3	Barium by ICP-MS	SOLID	LA-505-412		93.2	ug/g	4.62	0.92	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-41-7	Beryllium by ICP-MS	SOLID	LA-505-412	U	< 1.39	ug/g	4.62	1.4	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-43-9	Cadmium by ICP-MS	SOLID	LA-505-412	U	< 0.462	ug/g	4.62	0.46	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-47-3	Chromium by ICP-MS	SOLID	LA-505-412		4.53	ug/g	4.62	1.4	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-48-4	Cobalt by ICP-MS	SOLID	LA-505-412		10.8	ug/g	4.62	0.92	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-50-8	Copper by ICP-MS	SOLID	LA-505-412		13.7	ug/g	4.62	2.3	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7439-92-1	Lead by ICP-MS	SOLID	LA-505-412	U	< 5.54	ug/g	4.62	5.5	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7439-96-5	Manganese by ICP-MS	SOLID	LA-505-412		430	ug/g	4.62	1.4	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7439-97-6	Mercury by ICP-MS	SOLID	LA-505-412	U	< 0.462	ug/g	4.62	0.46	05/08/03 04/29/03 04/29/03

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*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000247	B16W97	TRENT	7439-98-7	Molybdenum by ICP-MS	SOLID	LA-505-412	1.75	ug/g	4.62	1.4	05/08/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	7440-02-0	Nickel by ICP-MS	SOLID	LA-505-412	8.02	ug/g	4.62	2.3	05/08/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	7782-49-2	Selenium by ICP-MS	SOLID	LA-505-412	U <	1.39	ug/g	4.62	1.4	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-22-4	Silver by ICP-MS	SOLID	LA-505-412	1.07	ug/g	4.62	0.92	05/08/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	7440-28-0	Thallium by ICP-MS	SOLID	LA-505-412	1.26	ug/g	4.62	0.46	05/08/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	7440-29-1	Thorium by ICP-MS	SOLID	LA-505-412	2.60	ug/g	4.62	0.92	05/08/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	7440-61-1	Uranium by ICP-MS	SOLID	LA-505-412	U <	0.462	ug/g	4.62	0.46	05/08/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7440-62-2	Vanadium by ICP-MS	SOLID	LA-505-412	104	ug/g	4.62	1.8	05/08/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	7440-66-6	Zinc by ICP-MS	SOLID	LA-505-412	51.8	ug/g	4.62	18	05/08/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	TPH-G	Total Pet. Hydrocarbons Gas	SOLID	NWTPH	U <	100	ug/kg	1.0e+02	05/07/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	12674-11-2	Aroclor-1018	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	11104-28-2	Aroclor-1221	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	11141-16-5	Aroclor-1232	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	53469-21-9	Aroclor-1242	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	12672-29-6	Aroclor-1248	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	11097-69-1	Aroclor-1254	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	11096-82-5	Aroclor-1260	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	37324-23-5	Aroclor-1262	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	11100-14-4	Aroclor-1268	SOLID	LA-523-427	U <	51.0	ug/kg	1.00	51	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	13981-16-3	Pu-238 by AEA	SOLID	LA-508-471	U <	2.00e-03	pCi/g	0.015	05/20/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	Pu-238 by AEA Total Cntg Err	SOLID	LA-508-471	200	%		0.0	05/20/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	E.T.C	Pu-239/240 AEA Total Cntg Err	SOLID	LA-508-471	350	%		0.0	05/20/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	PU-239/240	Pu-239/240 by AEA	SOLID	LA-508-471	U <	2.00e-03	pCi/g	0.015	05/20/03 04/29/03 04/29/03	
W030000247	B16W97	TRENT	120-82-1	1,2,4-Trichlorobenzene	SOLID	LA-523-456	U <	310	ug/kg	1.00	3.1e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	95-50-1	1,2-Dichlorobenzene (SV)	SOLID	LA-523-456	U <	380	ug/kg	1.00	3.8e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	541-73-1	1,3-Dichlorobenzene	SOLID	LA-523-456	U <	330	ug/kg	1.00	3.3e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	106-46-7	1,4-Dichlorobenzene (SV)	SOLID	LA-523-456	U <	330	ug/kg	1.00	3.3e+02	05/20/03 04/29/03 04/29/03

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**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000247	B16W97	TRENT	95-95-4	2,4,5-Trichlorophenol	SOLID	LA-523-456	U	< 77.0	ug/kg	1.00	77	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	88-06-2	2,4,6-Trichlorophenol	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	120-83-2	2,4-Dichlorophenol	SOLID	LA-523-456	U	< 83.0	ug/kg	1.00	83	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	105-67-9	2,4-Dimethylphenol	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	51-28-5	2,4-Dinitrophenol	SOLID	LA-523-456	U	< 700	ug/kg	1.00	7.0e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	121-14-2	2,4-Dinitrotoluene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	606-20-2	2,6-Dinitrotoluene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	111-76-2	2-Butoxyethanol	SOLID	LA-523-456	U	< 100	ug/kg	1.00	1.0e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	91-58-7	2-Chloronaphthalene	SOLID	LA-523-456	U	< 83.0	ug/kg	1.00	83	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	95-57-8	2-Chlorophenol	SOLID	LA-523-456	U	< 150	ug/kg	1.00	1.5e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	91-57-6	2-Methylnaphthalene	SOLID	LA-523-456	U	< 190	ug/kg	1.00	1.9e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	95-48-7	2-Methylphenol	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	88-74-4	2-Nitroaniline	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	88-75-5	2-Nitrophenol	SOLID	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	108-39-4	3 & 4 Methylphenol Total	SOLID	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	91-94-1	3,3'-Dichlorobenzidine	SOLID	LA-523-456	U	< 83.0	ug/kg	1.00	83	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	99-09-2	3-Nitroaniline	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	SOLID	LA-523-456	U	< 700	ug/kg	1.00	7.0e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	101-55-3	4-Bromophenyl-phenylether	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	59-50-7	4-Chloro-3-methylphenol	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	106-47-8	4-Chloraniline	SOLID	LA-523-456	U	< 97.0	ug/kg	1.00	97	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	7005-72-3	4-Chlorophenyl-phenylether	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	100-01-6	4-Nitroaniline	SOLID	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	100-02-7	4-Nitrophenol	SOLID	LA-523-456	U	< 670	ug/kg	1.00	6.7e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	83-32-9	Acenaphthene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	208-96-8	Acenaphthylene	SOLID	LA-523-456	U	< 83.0	ug/kg	1.00	83	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	120-12-7	Anthracene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03

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**Report W004/ver. 5.1**

**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	WSCF							Analyze	Sample	Receive	
				Matrix	Method	RQ	Result	Unit	DF	MDL				
W030000247	B16W97	TRENT	56-55-3	Benzo(a)anthracene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	50-32-8	Benzo(a)pyrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	205-99-2	Benzo(b)fluoranthene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	191-24-2	Benzo(g,h,i)perylene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	207-08-9	Benzo(k)fluoranthene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	100-51-6	Benzyl alcohol	SOLID	LA-523-456	U	< 77.0	ug/kg	1.00	77	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	117-81-7	Bis (2-Ethylhexyl) phthalate	SOLID	LA-523-456	U	< 580	ug/kg	1.00	5.8e+02	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	108-60-1	Bis(2-Chloro-1-methylene)	SOLID	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	85-68-7	Butylbenzylphthalate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	86-74-8	Carbazole	SOLID	LA-523-456	U	< 83.0	ug/kg	1.00	83	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	218-01-9	Chrysene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	84-74-2	Di-n-butylphthalate	SOLID	LA-523-456	U	< 90.0	ug/kg	1.00	90	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	117-84-0	Di-n-octylphthalate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	53-70-3	Dibenz(a,h)anthracene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	132-64-9	Dibenzofuran	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	84-66-2	Diethylphthalate	SOLID	LA-523-456	B	760	ug/kg	1.00	1.9e+02	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	131-11-3	Dimethylphthalate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	206-44-0	Fluoranthene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	86-73-7	Fluorene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	118-74-1	Hexachlorobenzene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	87-68-3	Hexachlorobutadiene	SOLID	LA-523-456	U	< 380	ug/kg	1.00	3.8e+02	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	77-47-4	Hexachlorocyclopentadiene	SOLID	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	67-72-1	Hexachloroethane	SOLID	LA-523-456	U	< 490	ug/kg	1.00	4.9e+02	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	78-59-1	Isoaphrone	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	621-64-7	N-Nitroso-di-n-propylamine	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03
W030000247	B16W97	TRENT	86-30-6	N-Nitrosodiphenylamine	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03	04/29/03	04/29/03

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*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000247	B16W97	TRENT	91-20-3	Naphthalene	SOLID	LA-523-456	U	< 300	ug/kg	1.00	3.0e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	98-95-3	Nitrobenzene	SOLID	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	87-86-5	Pentachlorophenol	SOLID	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	85-01-8	Phenanthrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	108-95-2	Phenol	SOLID	LA-523-456	U	< 100	ug/kg	1.00	1.0e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	129-00-0	Pyrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	126-73-8	Tri-n-butylphosphate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	111-44-4	bis(-2-Chloroethyl)Eth	SOLID	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	111-91-1	bis(2-Chloroethoxy)methane	SOLID	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	13966-29-5	U-234 by AEA	SOLID	LA-508-471		0.130	pCi/g		0.013	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	U-234 by AEA Total Cntg Error	SOLID	LA-508-471		30.0	%		0.0	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	15117-96-1	U-235 by AEA	SOLID	LA-508-471		0.0220	pCi/g		5.3e-03	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	U-235 by AEA Total Cntg Error	SOLID	LA-508-471		63.0	%		0.0	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	24678-82-8	U-238 by AEA	SOLID	LA-508-471		0.180	pCi/g		4.9e-03	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	E.T.C	U-238 by AEA Total Cntg Error	SOLID	LA-508-471		27.0	%		0.10	05/20/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	71-55-6	1,1,1-Trichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	79-00-5	1,1,2-Trichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-34-3	1,1-Dichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-35-4	1,1-Dichloroethene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	107-06-2	1,2-Dichloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	540-59-0	1,2-Dichloroethene (cis & tran)	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	78-87-5	1,2-Dichloropropane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	71-36-3	1-Butanol	SOLID	LA-523-455	U	< 19.0	ug/kg	1.00	19	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	78-93-3	2-Butanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	591-78-6	2-Hexanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	107-87-9	2-Pentanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03

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Ground Water Protection Program

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000247	B16W97	TRENT	108-10-1	4-Methyl-2-pentanone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	67-64-1	Acetone	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	71-43-2	Benzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-27-4	Bromodichloromethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-25-2	Bromoform	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	74-83-9	Bromomethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-15-0	Carbon Disulfide	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	56-23-5	Carbon Tetrachloride	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	108-90-7	Chlorobenzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-00-3	Chloroethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	67-66-3	Chloroform	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	74-87-3	Chloromethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	124-48-1	Dibromochloromethane	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	100-41-4	Ethylbenzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-09-2	Methylene Chloride	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	100-42-5	Styrene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	127-18-4	Tetrachloroethene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	108-88-3	Toluene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	1330-20-7	Total Xylenes	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	79-01-6	Trichloroethene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	75-01-4	Vinyl Chloride	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	10061-01-5	cis-1,3-Dichloropropene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	104-51-8	n-Butylbenzene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	10061-02-6	trans-1,3-Dichloropropene	SOLID	LA-523-455	U	< 1.90	ug/kg	1.00	1.9	05/07/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	8008-20-6	Kerosene	SOLID	NWTPH	U	< 4.20e+03	ug/kg	1.00	4.2e+03	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	68476-34-6	Total Pet. Hydrocarbons Diesel	SOLID	NWTPH	U	< 4.20e+03	ug/kg	1.00	4.2e+03	05/21/03 04/29/03 04/29/03
W030000247	B16W97	TRENT	84-15-1	ortho-Terphenyl	SOLID	NWTPH		1.90e+04	ug/kg	1.00	2.1e+02	05/21/03 04/29/03 04/29/03

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**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000248	B16W98	TRENT	7664-41-7	Ammonia (N) by IC	SOLID	LA-503-401	U	< 0.200	ug/g	50.00	0.20	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	57-12-5	Cyanide by Midi/Spectrophotom	SOLID	LA-695-402	U	< 0.190	mg/kg		0.19	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	TS	Percent Solids	SOLID	LA-519-412		95.1	%		0.0	05/30/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	PH	pH Soil and Waste Measurement	SOLID	LA-212-411		8.70	pH		0.010	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	540-51-2	2-Bromoethanol	SOLID	Organics		1.00e+04	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	60-29-7	Diethyl ether	SOLID	Organics	U	< 5.00e+03	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	107-21-1	Ethylene glycol	SOLID	Organics	U	< 5.00e+03	ug/kg		5.0e+03	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	67-56-1	Methanol	SOLID	Organics	U	< 1.00e+03	ug/kg		1.0e+03	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14596-10-2	Am-241 by AEA	SOLID	LA-508-471	U	0.0270	pCi/g		0.039	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E,T,C	Am-241 by AEA Total Crntg Error	SOLID	LA-508-471		95.0	%		0.0	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	24959-67-9	Bromide (Br) by IC	SOLID	LA-533-410	U	< 2.25	ug/g	50.00	2.2	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	16887-00-6	Chloride (Cl) by IC	SOLID	LA-533-410		1.22	ug/g	50.00	0.70	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	16984-48-8	Fluoride (F) by IC	SOLID	LA-533-410	U	< 0.350	ug/g	50.00	0.35	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	N03-N	Nitrate (N) by IC	SOLID	LA-533-410		11.6	ug/g	50.00	0.25	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	N02-N	Nitrite (N) by IC	SOLID	LA-533-410	U	< 0.450	ug/g	50.00	0.45	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14265-44-2	Phosphate (P) by IC	SOLID	LA-533-410	U	< 0.650	ug/g	50.00	0.65	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14808-79-8	Sulfate (SO4) by IC	SOLID	LA-533-410		2.73	ug/g	50.00	1.2	05/16/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E,T,C	Ac-228 Rel. % Count Error (GEA)	SOLID	LA-508-462		17.4	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14331-83-0	Ac-228 by GEA	SOLID	LA-508-462		0.443	pCi/g		0.035	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E,T,C	Am-241 Rel. % Count Error (GEA)	SOLID	LA-508-462		433	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14596-10-2	Am-241 by GEA	SOLID	LA-508-462	U	0.0114	pCi/g		0.087	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E,T,C	Bi-212 Rel. % Count Error (GEA)	SOLID	LA-508-462		37.9	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14913-49-6	Bi-212 by GEA	SOLID	LA-508-462		0.220	pCi/g		0.080	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E,T,C	Bi-214 Rel. % Count Error (GEA)	SOLID	LA-508-462		15.1	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14733-03-0	Bi-214 by GEA	SOLID	LA-508-462		0.340	pCi/g		0.020	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E,T,C	Ce-144 Rel. % Count Error (GEA)	SOLID	LA-508-462	U	113	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14762-78-8	Ce-144 by GEA	SOLID	LA-508-462	U	-0.0423	pCi/g		0.072	05/01/03 04/29/03 04/29/03

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**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample Receive
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		372	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	10198-40-0	SOLID	LA-508-462	U	-2.13e-03	pCi/g	0.011	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		76.1	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	13967-70-9	SOLID	LA-508-462	U	0.0318	pCi/g	0.013	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		293	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	10045-97-3	SOLID	LA-508-462	U	2.58e-03	pCi/g	0.011	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		271	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	14683-23-9	SOLID	LA-508-462	U	8.22e-03	pCi/g	0.029	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		1.00e+03	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	15585-10-1	SOLID	LA-508-462	U	-4.70e-04	pCi/g	0.035	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		87.0	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	14391-16-3	SOLID	LA-508-462		0.0369	pCi/g	0.039	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		1.00e+03	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	14681-63-1	SOLID	LA-508-462	U	4.02e-04	pCi/g	0.010	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		13.7	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	15092-94-1	SOLID	LA-508-462		0.432	pCi/g	0.020	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		15.7	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	15067-28-4	SOLID	LA-508-462		0.384	pCi/g	0.021	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		15.1	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	13982-63-3	SOLID	LA-508-462		0.340	pCi/g	0.020	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		17.4	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	15262-20-1	SOLID	LA-508-462		0.443	pCi/g	0.035	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		1.00e+03	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	13968-53-1	SOLID	LA-508-462	U	1.46e-04	pCi/g	9.6e-03	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		372	%	0.0	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	13967-48-1	SOLID	LA-508-462	U	0.0150	pCi/g	0.094	05/01/03 04/29/03 04/29/03	
W030000248	B16W98	TRENT	E.T.C	SOLID	LA-508-462		1.00e+03	%	0.0	05/01/03 04/29/03 04/29/03	

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*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample Receive
W030000248	B16W98	TRENT	14234-35-6	Sb-125 by GEA	SOLID	LA-508-462 U	6.86e-05	pCi/g		0.027	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	Sn-113 Rel. % Count Error (GEA)	SOLID	LA-508-462	100	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	13966-06-8	Sn-113 by GEA	SOLID	LA-508-462 U	-9.21e-03	pCi/g		0.012	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	Sn-126 Rel. % Count Error (GEA)	SOLID	LA-508-462	32.9	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	15832-50-5	Sn-126 by GEA	SOLID	LA-508-462 U	0.0898	pCi/g		0.090	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	Th-234 Rel. % Count Error (GEA)	SOLID	LA-508-462	46.3	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	15065-10-8	Th-234 by GEA	SOLID	LA-508-462 U	0.425	pCi/g		0.75	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	Tl-208 Rel. % Count Error (GEA)	SOLID	LA-508-462	15.9	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	14913-50-9	Tl-208 by GEA	SOLID	LA-508-462	0.138	pCi/g		0.010	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	U-235 Rel. % Count Error (GEA)	SOLID	LA-508-462	31.0	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	15117-96-1	U-235 by GEA	SOLID	LA-508-462 U	0.0584	pCi/g		0.078	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	Zn-65 Rel. % Count Error (GEA)	SOLID	LA-508-462	48.4	%		0.0	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	13982-39-3	Zn-65 by GEA	SOLID	LA-508-462 U	0.0361	pCi/g		0.027	05/01/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-69-9	Bismuth by ICP	SOLID	LA-505-411 U	< 9.84	ug/g	98.40	9.8	05/28/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-50-8	Boron by ICP	SOLID	LA-505-411 U	< 10.00	ug/g	98.40	10.04	05/28/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7429-90-5	Aluminum by ICP-MS	SOLID	LA-505-412 E	7.44e+03	ug/g	4.91	54	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-36-0	Antimony by ICP-MS	SOLID	LA-505-412 U	< 2.46	ug/g	4.91	2.5	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-38-2	Arsenic by ICP-MS	SOLID	LA-505-412 U	< 1.47	ug/g	4.91	1.5	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-39-3	Barium by ICP-MS	SOLID	LA-505-412	91.6	ug/g	4.91	0.98	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-41-7	Beryllium by ICP-MS	SOLID	LA-505-412 U	< 1.47	ug/g	4.91	1.5	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-43-9	Cadmium by ICP-MS	SOLID	LA-505-412 U	< 0.491	ug/g	4.91	0.49	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-47-3	Chromium by ICP-MS	SOLID	LA-505-412	4.36	ug/g	4.91	1.5	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-48-4	Cobalt by ICP-MS	SOLID	LA-505-412	11.4	ug/g	4.91	0.98	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7440-50-8	Copper by ICP-MS	SOLID	LA-505-412	14.2	ug/g	4.91	2.5	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7439-92-1	Lead by ICP-MS	SOLID	LA-505-412 U	< 5.89	ug/g	4.91	5.9	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7439-96-5	Manganese by ICP-MS	SOLID	LA-505-412	415	ug/g	4.91	1.5	05/08/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7439-97-6	Mercury by ICP-MS	SOLID	LA-505-412 U	< 0.491	ug/g	4.91	0.49	05/08/03 04/29/03 04/29/03

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*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Result	Unit	DF	MDL	Analyze Sample	Receive		
					Method	RQ								
W030000248	B16W98	TRENT	7439-98-7	Molybdenum by ICP-MS	SOLID	LA-505-412	U	< 1.47	ug/g	4.91	1.5	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7440-02-0	Nickel by ICP-MS	SOLID	LA-505-412		7.57	ug/g	4.91	2.5	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7782-49-2	Selenium by ICP-MS	SOLID	LA-505-412	U	< 1.47	ug/g	4.91	1.5	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7440-22-4	Silver by ICP-MS	SOLID	LA-505-412	U	< 0.982	ug/g	4.91	0.98	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7440-28-0	Thallium by ICP-MS	SOLID	LA-505-412	U	< 0.491	ug/g	4.91	0.49	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7440-29-1	Thorium by ICP-MS	SOLID	LA-505-412		2.06	ug/g	4.91	0.98	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7440-61-1	Uranium by ICP-MS	SOLID	LA-505-412	U	< 0.491	ug/g	4.91	0.49	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7440-62-2	Vanadium by ICP-MS	SOLID	LA-505-412		105	ug/g	4.91	2.0	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	7440-66-6	Zinc by ICP-MS	SOLID	LA-505-412		55.9	ug/g	4.91	20	05/08/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	TPH-G	Total Pet. Hydrocarbons Gas	SOLID	NWTPH	U	< 100	ug/kg		1.0e+02	05/07/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	12674-11-2	Aroclor-1016	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	11104-28-2	Aroclor-1221	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	11141-16-5	Aroclor-1232	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	53469-21-9	Aroclor-1242	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	12672-29-6	Aroclor-1248	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	11097-69-1	Aroclor-1254	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	11096-82-5	Aroclor-1260	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	37324-23-5	Aroclor-1262	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	11100-14-4	Aroclor-1268	SOLID	LA-523-427	U	< 51.0	ug/kg	1.00	51	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	13981-16-3	Pu-238 by AEA	SOLID	LA-508-471	U	9.70e-03	pCi/g		0.023	05/20/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	E.T.C	Pu-238 by AEA Total Cntg Error	SOLID	LA-508-471		140	%		0.0	05/20/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	E.T.C	Pu-239/240 AEA Total Cntg Err	SOLID	LA-508-471		84.0	%		0.0	05/20/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	PU-239/240	Pu-239/240 by AEA	SOLID	LA-508-471		0.0120	pCi/g		5.3e-03	05/20/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	120-82-1	1,2,4-Trichlorobenzene	SOLID	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	95-50-1	1,2-Dichlorobenzene (SV)	SOLID	LA-523-456	U	< 380	ug/kg	1.00	3.8e+02	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	541-73-1	1,3-Dichlorobenzene	SOLID	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/21/03	04/29/03	04/29/03
W030000248	B16W98	TRENT	106-46-7	1,4-Dichlorobenzene (SV)	SOLID	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/21/03	04/29/03	04/29/03

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Report W004/ver. 5.1

Ground Water Protection Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive		
					Method	RQ							
W030000248	B16W98	TRENT	95-95-4	2,4,5-Trichlorophenol	SOLID	LA-523-456	U	<	77.0	ug/kg	1.00	77	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	88-06-2	2,4,6-Trichlorophenol	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	120-83-2	2,4-Dichlorophenol	SOLID	LA-523-456	U	<	84.0	ug/kg	1.00	84	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	105-67-9	2,4-Dimethylphenol	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	51-28-5	2,4-Dinitrophenol	SOLID	LA-523-456	U	<	700	ug/kg	1.00	7.0e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	121-14-2	2,4-Dinitrotoluene	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	606-20-2	2,6-Dinitrotoluene	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	111-76-2	2-Butoxyethanol	SOLID	LA-523-456	U	<	100	ug/kg	1.00	1.0e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	91-58-7	2-Chloronaphthalene	SOLID	LA-523-456	U	<	84.0	ug/kg	1.00	84	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	95-57-8	2-Chlorophenol	SOLID	LA-523-456	U	<	150	ug/kg	1.00	1.5e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	91-57-6	2-Methylnaphthalene	SOLID	LA-523-456	U	<	190	ug/kg	1.00	1.8e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	95-48-7	2-Methylphenol	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	88-74-4	2-Nitroaniline	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	88-75-5	2-Nitrophenol	SOLID	LA-523-456	U	<	180	ug/kg	1.00	1.8e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	108-39-4	3 & 4 Methylphenol Total	SOLID	LA-523-456	U	<	120	ug/kg	1.00	1.2e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	91-94-1	3,3'-Dichlorobenzidine	SOLID	LA-523-456	U	<	84.0	ug/kg	1.00	84	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	99-09-2	3-Nitroaniline	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	SOLID	LA-523-456	U	<	700	ug/kg	1.00	7.0e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	101-55-3	4-Bromophenyl-phenylether	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	59-50-7	4-Chloro-3-methylphenol	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	106-47-8	4-Chloroaniline	SOLID	LA-523-456	U	<	98.0	ug/kg	1.00	98	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	7005-72-3	4-Chlorophenyl-phenylether	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	100-01-6	4-Nitroaniline	SOLID	LA-523-456	U	<	260	ug/kg	1.00	2.6e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	100-02-7	4-Nitrophenol	SOLID	LA-523-456	U	<	680	ug/kg	1.00	6.8e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	83-32-8	Acenaphthene	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	208-96-8	Acenaphthylene	SOLID	LA-523-456	U	<	84.0	ug/kg	1.00	84	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	120-12-7	Anthracene	SOLID	LA-523-456	U	<	70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03

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*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**Project:** F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000248	B16W98	TRENT	56-55-3	Benz(a)anthracene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	50-32-8	Benz(a)pyrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	205-99-2	Benz(b)fluoranthene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	191-24-2	Benz(g,h,i)perylene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	207-08-9	Benz(k)fluoranthene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	100-51-6	Benzyl alcohol	SOLID	LA-523-456	U	< 77.0	ug/kg	1.00	77	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	117-81-7	Bis (2-Ethylhexyl) phthalate	SOLID	LA-523-456	U	< 590	ug/kg	1.00	5.9e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	108-60-1	Bis(2-Chloro-1-methylene)	SOLID	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	85-68-7	Butylbenzylphthalate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	86-74-8	Carbazole	SOLID	LA-523-456	U	< 84.0	ug/kg	1.00	84	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	218-01-9	Chrysene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	84-74-2	Di-n-butylphthalate	SOLID	LA-523-456	U	< 91.0	ug/kg	1.00	91	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	117-84-0	Di-n-octylphthalate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	53-70-3	Dibenz(a,h)anthracene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	132-64-9	Dibenzofuran	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	84-66-2	Diethylphthalate	SOLID	LA-523-456	B	700	ug/kg	1.00	2.0e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	131-11-3	Dimethylphthalate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	206-44-0	Fluoranthene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	86-73-7	Fluorene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	118-74-1	Hexachlorobenzene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	87-68-3	Hexachlorobutadiene	SOLID	LA-523-456	U	< 380	ug/kg	1.00	3.8e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	77-47-4	Hexachlorocyclopentadiene	SOLID	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	67-72-1	Hexachloroethane	SOLID	LA-523-456	U	< 490	ug/kg	1.00	4.9e+02	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	78-59-1	Isoaphrone	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	621-64-7	N-Nitroso-di-n-propylamine	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	86-30-6	N-Nitrosodiphenylamine	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70	05/21/03 04/29/03 04/29/03

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E - Analyte is an estimate, has potentially larger errors

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U - Analyzed for but not detected above limiting criteria.

**DF=Dilution Factor**

- Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample Receive
W030000248	B16W98	TRENT	91-20-3	Naphthalene	SOLID	LA-523-456	U	< 300	ug/kg	1.00	3.0e+02 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	98-95-3	Nitrobenzene	SOLID	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	87-86-5	Pentachlorophenol	SOLID	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	85-01-8	Phenanthrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	108-95-2	Phenol	SOLID	LA-523-456	U	< 100	ug/kg	1.00	1.0e+02 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	129-00-0	Pyrene	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	126-73-8	Tri-n-butylphosphate	SOLID	LA-523-456	U	< 70.0	ug/kg	1.00	70 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	111-44-4	bis(2-Chloroethoxy)Eth	SOLID	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	111-91-1	bis(2-Chloroethoxy)methane	SOLID	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02 05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	13966-29-5	U-234 by AEA	SOLID	LA-508-471		0.130	pCi/g	0.017	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	U-234 by AEA Total Cntg Error	SOLID	LA-508-471		30.0	%	0.0	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	15117-96-1	U-235 by AEA	SOLID	LA-508-471		9.70e-03	pCi/g	5.3e-03	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	U-235 by AEA Total Cntg Error	SOLID	LA-508-471		91.0	%	0.0	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	24678-82-8	U-238 by AEA	SOLID	LA-508-471		0.150	pCi/g	4.8e-03	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	E.T.C	U-238 by AEA Total Cntg Error	SOLID	LA-508-471		29.0	%	0.10	05/20/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	71-55-6	1,1,1-Trichloroethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	79-00-5	1,1,2-Trichloroethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	75-34-3	1,1-Dichloromethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	75-35-4	1,1-Dichloroethene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	107-06-2	1,2-Dichloroethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	540-59-0	1,2-Dichloroethene (cis & tran)	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	78-87-5	1,2-Dichloropropane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	71-36-3	1-Butanol	SOLID	LA-523-455	U	< 20.0	ug/kg	1.00	20 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	78-93-3	2-Butanone	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	591-78-6	2-Hexanone	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	107-87-9	2-Pentanone	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0 05/07/03 04/29/03 04/29/03

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E - Analyte is an estimate, has potentially larger errors

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\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-006: 200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample	Receive
W030000248	B16W98	TRENT	108-10-1	4-Methyl-2-pentanone	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	67-64-1	Acetone	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	71-43-2	Benzene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	76-27-4	Bromodichloromethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	75-25-2	Bromoform	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	74-83-9	Bromomethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	75-15-0	Carbon Disulfide	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	56-23-5	Carbon Tetrachloride	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	108-90-7	Chlorobenzene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	75-00-3	Chloroethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	67-66-3	Chloroform	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	74-87-3	Chloromethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	124-48-1	Dibromochloromethane	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	100-41-4	Ethylbenzene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	75-09-2	Methylene Chloride	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	100-42-5	Styrene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	127-18-4	Tetrachloroethene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	108-88-3	Toluene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	1330-20-7	Total Xylenes	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	79-01-6	Trichloroethene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	75-01-4	Vinyl Chloride	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	10061-01-5	cis-1,3-Dichloropropene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	104-51-8	n-Butylbenzene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	10061-02-6	trans-1,3-Dichloropropene	SOLID	LA-523-455	U	< 2.00	ug/kg	1.00	2.0	05/07/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	8008-20-6	Kerosene	SOLID	NWTPH	U	< 4.20e+03	ug/kg	1.00	4.2e+03	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	68476-34-6	Total Pet. Hydrocarbons Diesel	SOLID	NWTPH	U	< 4.20e+03	ug/kg	1.00	4.2e+03	05/21/03 04/29/03 04/29/03
W030000248	B16W98	TRENT	84-15-1	ortho-Terphenyl	SOLID	NWTPH		1.90e+04	ug/kg	1.00	2.1e+02	05/21/03 04/29/03 04/29/03

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B - The analyte < the RDL but > = the IDL/MDL (inorganic)

E - Analyte is an estimate, has potentially larger errors

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U - Analyzed for but not detected above limiting criteria.

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

**WSCF**  
**ANALYTICAL RESULTS REPORT**

Attention: Steve Trent  
 Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20030598

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample	Receive
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**MDL=Minimum Detection Limit**  
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*Ground Water Protection Program*

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# WSCF

## ANALYTICAL COMMENT REPORT

**Attention:** Steve Trent  
**Project Number** F03-006

**Group #:** WSCF20030598

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>ICP-MS: Aluminum concentrations beyond linear range ("E")</p> <p>High nickel, silver, zinc, aluminum, manganese and low mercury LCS recoveries but no flags issued because results are within manufacturer's performance acceptance limits.</p> <p>Comment for W030000246-248 for GEA: The presence and activity of Sn-126 could not be determined due to the peak interferences coming from the daughter nuclides present in natural radioactivity (Uranium and Thorium) in the samples.lmh</p> <p>Sample W030000246 for PU/AM test had poor RPD. RPD is not applicable to low level samples.lmh</p> <p>TPHD/PCB/SVOA: All results are moisture corrected and reported on a dry weight basis. cgc</p> <p>@8015GPP: MS a bit low at 80%, hence SPK-RPD out high, gar SVOA: A J flag is used for target compounds when the concentration is below the lowest calibration standard but above the detection limit. The samples are reported on a dry wt. basis. The MS had 1,4-Dichlorobenzene out high at 96.4% (the upper limit is 96.0%). den</p> <p>ICP-AES: High LCS recovery for Bismuth (126%). All samples were less than, no qualifiers will be assigned. Boron was within the Performance Acceptance Limits for the ERA soil Standard. ldl</p>

**Lab Areas:** VALGROUP - Group Validation  
LOGSAMP - Login for Sample

VALTEST - Test Validation  
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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# WSCF

## TENTATIVELY IDENTIFIED PEAK REPORT

**Attention:** Steve Trent  
**Project Number** F03-006 :200-PW-2/PW-4

**Group #:** WSCF20030598

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W030000246	B16W96	TRENT	Gamma Energy Analysis-grd H2O	K-40			11.0	pCi/g
W030000246	B16W96	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error			11.520	%
W030000246	B16W96	TRENT	SW-846 8270B Semi-Vols	SMP 16.265 Unknown	Unknown	16.26561	J	160
W030000246	B16W96	TRENT	SW-846 8270B Semi-Vols	SMP 10.779 Unknown	Unknown	10.77928	J	170
W030000246	B16W96	TRENT	SW-846 8270B Semi-Vols	SMP 6.937 Unknown	Unknown	6.937833	JN	200
W030000246	B16W96	TRENT	SW-846 8270B Semi-Vols	SMP 5.037 Unknown	Unknown	5.03755	BJ	210
W030000247	B16W97	TRENT	Gamma Energy Analysis-grd H2O	K-40			11.3	pCi/g
W030000247	B16W97	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error			11.523	%
W030000247	B16W97	TRENT	SW-846 8270B Semi-Vols	SMP 12.830 Benzenesulfonamide, N-	3622-84-2	12.8307	JN	1100
W030000247	B16W97	TRENT	SW-846 8270B Semi-Vols	SMP 10.777 Unknown	Unknown	10.77715	J	170
W030000247	B16W97	TRENT	SW-846 8270B Semi-Vols	SMP 6.935 Unknown	Unknown	6.9357	JN	200
W030000247	B16W97	TRENT	SW-846 8270B Semi-Vols	SMP 18.572 Unknown	Unknown	18.57243	J	2200
W030000247	B16W97	TRENT	SW-846 8270B Semi-Vols	SMP 5.403 Unknown	Unknown	5.403216	J	230
W030000247	B16W97	TRENT	SW-846 8270B Semi-Vols	SMP 5.035 Unknown	Unknown	5.035416	BJ	240
W030000248	B16W98	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error			11.627	%
W030000248	B16W98	TRENT	Gamma Energy Analysis-grd H2O	K-40			9.69	pCi/g
W030000248	B16W98	TRENT	SW-846 8270B Semi-Vols	SMP 12.830 Benzenesulfonamide, N-	3622-84-2	12.83078	JN	1000
W030000248	B16W98	TRENT	SW-846 8270B Semi-Vols	SMP 6.200 Unknown	Unknown	6.2002	J	150
W030000248	B16W98	TRENT	SW-846 8270B Semi-Vols	SMP 10.787 Unknown	Unknown	10.78746	J	160
W030000248	B16W98	TRENT	SW-846 8270B Semi-Vols	SMP 5.372 Unknown	Unknown	5.37265	J	160
W030000248	B16W98	TRENT	SW-846 8270B Semi-Vols	SMP 5.035 Unknown	Unknown	5.035516	BJ	200
W030000248	B16W98	TRENT	SW-846 8270B Semi-Vols	SMP 6.946 Unknown	Unknown	6.946016	JN	230
W030000248	B16W98	TRENT	SW-846 8270B Semi-Vols	SMP 5.413 Unknown	Unknown	5.413516	JN	240

**RQ=Result Qualifier**

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

J - Estimated Value

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**Ground Water Protection Program**

W04E v 4.1 Report #: 20030598

Report Date: 30-may-2003

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# WSCF

## METHOD REFERENCES REPORT

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

<b>LA-212-411</b>	Determination of Soil pH Measurement EPA SW-846 9045C	SOIL AND WASTE pH
<b>LA-503-401</b>	LA-503-401: ANALYSIS OF CATIONS BY ION CHROMATOGRAPHY EPA-600/4-86-024 300.7	Dissolved Sodium, Ammonium, Potassium, and Calcium in Wet Deposition by Chemical
<b>LA-505-411</b>	LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE EPA SW-846 6010B	INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROMETRY
<b>LA-505-412</b>	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY EPA-600/R-94-111 200.8	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS
<b>LA-508-462</b>	Gamma Energy Analysis -- the Genie System -- WSCF None	No reference to any industry method.
<b>LA-508-471</b>	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP None	No reference to any industry method.
<b>LA-519-412</b>	LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C EPA-600/4-79-020 160.3 Standard Methods 2540B	RESIDUE, TOTAL Total Solids Dried at 103-105 C
<b>LA-523-427</b>	LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY EPA SW-846 3510C EPA SW-846 3545	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION PRESSURIZED FLUID EXTRACTION (PFE)

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at  
<http://apweb02/asponlinedocs/wscf/sample%20mgmt/ProcedureMethodCrossReference.pdf>. This document includes on-line  
links to full-text versions of the procedures and methods, where available.

Report Date: 30-may-2003

Report #: WSCF20030598

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# WSCF

## METHOD REFERENCES REPORT

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

	EPA SW-846 3665A	SULFURIC ACID/PERMANGANATE CLEANUP
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8082	POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY
<b>LA-523-455</b>	LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846	
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8260B	VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
<b>LA-523-456</b>	LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C	
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
<b>LA-533-410</b>	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY	
	EPA-600/R-94-111 300	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
<b>LA-695-402</b>	LA-695-402: DETERMINATION OF CYANIDE BY MIDIDISTILLATION AND SPECTROPHOTOMETRIC	
	EPA-600/4-79-020 335.2	Cyanide, Total
<b>NWTPH</b>	NWTPH-Diesel and/or Gasoline	
	WDOE NWTPH-Dx/Gx	Total Petroleum Hydrocarbons - Diesel/Gasoline
<b>Organics</b>	Organics - Alcohols, Glycols	
	EPA SW-846 8015B	Nonhalogenated Organics Using GC/FID

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at  
<http://apweb02/asponlinedocs/wscf/sample%20mgmt/ProcedureMethodCrossReference.pdf>. This document includes on-line links to full-text versions of the procedures and methods, where available.

Report Date: 30-may-2003

Report #: WSCF20030598

Report WO4M/2

## W13q Worklist/Batch/QC Report for Group# WSCF20030598

WL#	S#	Batch	QC#	Tray	Type	Sample#	Test
				SAMPLE		W030000246	Sample Screen - LAB USE ONLY
				SAMPLE		W030000247	Sample Screen - LAB USE ONLY
				SAMPLE		W030000248	Sample Screen - LAB USE ONLY
				SAMPLE		W030000246	Percent Solids
				SAMPLE		W030000247	Percent Solids
				SAMPLE		W030000248	Percent Solids
				SAMPLE		W030000246	pH Soil and Waste Measurement
				SAMPLE		W030000247	pH Soil and Waste Measurement
				SAMPLE		W030000248	pH Soil and Waste Measurement
19278	1	19674	22361	SAMPLE		W030000246	Gamma Energy Analysis-grd H2O
19278	2	19674	22361	SAMPLE		W030000247	Gamma Energy Analysis-grd H2O
19278	3	19674	22361	SAMPLE		W030000248	Gamma Energy Analysis-grd H2O
19392	1	19783	22462	BLANK			ICP-2008 MS All possible metal
19392	8	19783	22462	BLANK			ICP-2008 MS All possible metal
19392	15	19783	22462	BLANK			ICP-2008 MS All possible metal
19392	21	19783	22462	BLANK			ICP-2008 MS All possible metal
19392	3	19783	22462	LCS			ICP-2008 MS All possible metal
19392	9	19783	22462	LCS			ICP-2008 MS All possible metal
19392	16	19783	22462	LCS			ICP-2008 MS All possible metal
19392	22	19783	22462	LCS			ICP-2008 MS All possible metal
19392	18	19783	22462	MS	W030000195		ICP-2008 MS All possible metal
19392	19	19783	22462	MSD	W030000195		ICP-2008 MS All possible metal
19392	4	19783	22462	MS	W030000236		ICP-2008 MS All possible metal
19392	5	19783	22462	MSD	W030000236		ICP-2008 MS All possible metal
19392	11	19783	22462	MS	W030000246		ICP-2008 MS All possible metal
19392	12	19783	22462	MSD	W030000246		ICP-2008 MS All possible metal
19392	10	19783	22462	SAMPLE	W030000246		ICP-2008 MS All possible metal
19392	13	19783	22462	SAMPLE	W030000247		ICP-2008 MS All possible metal
19392	14	19783	22462	SAMPLE	W030000248		ICP-2008 MS All possible metal
19392	24	19783	22462	MS	W030000265		ICP-2008 MS All possible metal
19392	25	19783	22462	MSD	W030000265		ICP-2008 MS All possible metal
19433	2	19823	22541	BLANK			Anions by Ion Chromatography
19433	10	19823	22541	BLANK			Anions by Ion Chromatography
19433	3	19823	22541	LCS			Anions by Ion Chromatography
19433	5	19823	22541	DUP	W030000246		Anions by Ion Chromatography
19433	6	19823	22541	MS	W030000246		Anions by Ion Chromatography
19433	7	19823	22541	MSD	W030000246		Anions by Ion Chromatography
19433	4	19823	22541	SAMPLE	W030000246		Anions by Ion Chromatography
19433	8	19823	22541	SAMPLE	W030000247		Anions by Ion Chromatography
19433	9	19823	22541	SAMPLE	W030000248		Anions by Ion Chromatography
19435	3	19825	22542	BLNK-PREP			Ammonia (N) by IC
19435	12	19825	22542	BLNK-PREP			Ammonia (N) by IC
19435	1	19825	22542	LCS			Ammonia (N) by IC
19435	5	19825	22542	DUP	W030000246		Ammonia (N) by IC
19435	6	19825	22542	MS	W030000246		Ammonia (N) by IC
19435	7	19825	22542	MSD	W030000246		Ammonia (N) by IC
19435	4	19825	22542	SAMPLE	W030000246		Ammonia (N) by IC
19435	8	19825	22542	SAMPLE	W030000247		Ammonia (N) by IC
19435	9	19825	22542	SAMPLE	W030000248		Ammonia (N) by IC

19440	1	19830	22562	BLANK		Uranium Isotopics by AEA
19440	2	19830	22562	LCS		Uranium Isotopics by AEA
19440	3	19830	22562	DUP	W030000246	Uranium Isotopics by AEA
19440	4	19830	22562	SAMPLE	W030000246	Uranium Isotopics by AEA
19440	5	19830	22562	SAMPLE	W030000247	Uranium Isotopics by AEA
19440	6	19830	22562	SAMPLE	W030000248	Uranium Isotopics by AEA
			22568	BLANK		Cyanide by Midi/Spectrophotom
			22568	BLNK-PREP		Cyanide by Midi/Spectrophotom
			22568	DUP		Cyanide by Midi/Spectrophotom
			22568	LCS		Cyanide by Midi/Spectrophotom
			22568	LCS-2		Cyanide by Midi/Spectrophotom
			22568	MS	W030000246	Cyanide by Midi/Spectrophotom
			22568	MSD	W030000246	Cyanide by Midi/Spectrophotom
			22568	SAMPLE	W030000246	Cyanide by Midi/Spectrophotom
			22568	SPK-RPD	W030000246	Cyanide by Midi/Spectrophotom
			22568	SAMPLE	W030000247	Cyanide by Midi/Spectrophotom
			22568	SAMPLE	W030000248	Cyanide by Midi/Spectrophotom
19487	1	19876	22582	BLANK		NWTPH-GX TPH Gasoline Range
19487	2	19876	22582	LCS		NWTPH-GX TPH Gasoline Range
19487	4	19876	22582	MS	W030000246	NWTPH-GX TPH Gasoline Range
19487	5	19876	22582	MSD	W030000246	NWTPH-GX TPH Gasoline Range
19487	3	19876	22582	SAMPLE	W030000246	NWTPH-GX TPH Gasoline Range
19487	5	19876	22582	SPK-RPD	W030000246	NWTPH-GX TPH Gasoline Range
19487	6	19876	22582	SAMPLE	W030000247	NWTPH-GX TPH Gasoline Range
19487	7	19876	22582	SAMPLE	W030000248	NWTPH-GX TPH Gasoline Range
19442	1	19832	22584	BLANK		Plutonium Isotopics by AEA
19442	2	19832	22584	LCS		Plutonium Isotopics by AEA
19442	3	19832	22584	DUP	W030000246	Plutonium Isotopics by AEA
19442	4	19832	22584	SAMPLE	W030000246	Plutonium Isotopics by AEA
19442	5	19832	22584	SAMPLE	W030000247	Plutonium Isotopics by AEA
19442	6	19832	22584	SAMPLE	W030000248	Plutonium Isotopics by AEA
19443	1	19833	22585	BLANK		Americium by AEA
19443	2	19833	22585	LCS		Americium by AEA
19443	3	19833	22585	DUP	W030000246	Americium by AEA
19443	4	19833	22585	SAMPLE	W030000246	Americium by AEA
19443	5	19833	22585	SAMPLE	W030000247	Americium by AEA
19443	6	19833	22585	SAMPLE	W030000248	Americium by AEA
19489	1	19878	22588	BLANK		Alcohols, Glycols - 8015
19489	2	19878	22588	LCS		Alcohols, Glycols - 8015
19489	4	19878	22588	MS	W030000246	Alcohols, Glycols - 8015
19489	5	19878	22588	MSD	W030000246	Alcohols, Glycols - 8015
19489	3	19878	22588	SAMPLE	W030000246	Alcohols, Glycols - 8015
19489	5	19878	22588	SPK-RPD	W030000246	Alcohols, Glycols - 8015
19489	6	19878	22588	SAMPLE	W030000247	Alcohols, Glycols - 8015
19489	7	19878	22588	SAMPLE	W030000248	Alcohols, Glycols - 8015
			22594	BLANK		WTPH-D TPH Diesel Range (Wa)
			22594	LCS		WTPH-D TPH Diesel Range (Wa)
			22594	SAMPLE	W030000246	WTPH-D TPH Diesel Range (Wa)
			22594	SURR	W030000246	WTPH-D TPH Diesel Range (Wa)
			22594	MS	W030000247	WTPH-D TPH Diesel Range (Wa)
			22594	MSD	W030000247	WTPH-D TPH Diesel Range (Wa)
			22594	SAMPLE	W030000247	WTPH-D TPH Diesel Range (Wa)
			22594	SPK-RPD	W030000247	WTPH-D TPH Diesel Range (Wa)
			22594	SURR	W030000247	WTPH-D TPH Diesel Range (Wa)

22594	SAMPLE	W030000248	WTPH-D TPH Diesel Range (Wa)
22594	SURR	W030000248	WTPH-D TPH Diesel Range (Wa)
22600	BLANK		PCBs complete list
22600	LCS		PCBs complete list
22600	SAMPLE	W030000246	PCBs complete list
22600	SURR	W030000246	PCBs complete list
22600	MS	W030000247	PCBs complete list
22600	MSD	W030000247	PCBs complete list
22600	SAMPLE	W030000247	PCBs complete list
22600	SPK-RPD	W030000247	PCBs complete list
22600	SURR	W030000247	PCBs complete list
22600	SAMPLE	W030000248	PCBs complete list
22600	SURR	W030000248	PCBs complete list
22601	BLANK		VOA Ground Water Protection
22601	LCS		VOA Ground Water Protection
22601	MS	W030000236	VOA Ground Water Protection
22601	MSD	W030000236	VOA Ground Water Protection
22601	MS	W030000246	VOA Ground Water Protection
22601	MSD	W030000246	VOA Ground Water Protection
22601	SAMPLE	W030000246	VOA Ground Water Protection
22601	SPK-RPD	W030000246	VOA Ground Water Protection
22601	SURR	W030000246	VOA Ground Water Protection
22601	SAMPLE	W030000247	VOA Ground Water Protection
22601	SURR	W030000247	VOA Ground Water Protection
22601	SAMPLE	W030000248	VOA Ground Water Protection
22601	SURR	W030000248	VOA Ground Water Protection
22609	BLANK		SW-846 8270B Semi-Vols
22609	LCS		SW-846 8270B Semi-Vols
22609	SAMPLE	W030000246	SW-846 8270B Semi-Vols
22609	SURR	W030000246	SW-846 8270B Semi-Vols
22609	MS	W030000247	SW-846 8270B Semi-Vols
22609	MSD	W030000247	SW-846 8270B Semi-Vols
22609	SAMPLE	W030000247	SW-846 8270B Semi-Vols
22609	SPK-RPD	W030000247	SW-846 8270B Semi-Vols
22609	SURR	W030000247	SW-846 8270B Semi-Vols
22609	SAMPLE	W030000248	SW-846 8270B Semi-Vols
22609	SURR	W030000248	SW-846 8270B Semi-Vols
19498 1 19882 22610	BLANK		ICP Metals Analysis, Grd H20 P
19498 2 19882 22610	LCS		ICP Metals Analysis, Grd H20 P
19498 4 19882 22610	MS	W030000236	ICP Metals Analysis, Grd H20 P
19498 5 19882 22610	MSD	W030000236	ICP Metals Analysis, Grd H20 P
19498 9 19882 22610	MS	W030000246	ICP Metals Analysis, Grd H20 P
19498 10 19882 22610	MSD	W030000246	ICP Metals Analysis, Grd H20 P
19498 8 19882 22610	SAMPLE	W030000246	ICP Metals Analysis, Grd H20 P
19498 11 19882 22610	SAMPLE	W030000247	ICP Metals Analysis, Grd H20 P
19498 12 19882 22610	SAMPLE	W030000248	ICP Metals Analysis, Grd H20 P
19498 14 19882 22610	MS	W030000265	ICP Metals Analysis, Grd H20 P
19498 15 19882 22610	MSD	W030000265	ICP Metals Analysis, Grd H20 P
19498 0 19882 22610	SPK-RPD	W030000265	ICP Metals Analysis, Grd H20 P

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: ICP-2008 MS All possible metal

SAF Number: F03-006  
 Sample Date: 04/17/03  
 Receive Date: 04/17/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000195</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	Silver by ICP-MS	7440-22-4	93.558	% Recov	05/08/03	70.000	130.000
MS	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/08/03	70.000	130.000
MS	Arsenic by ICP-MS	7440-38-2	97.137	% Recov	05/08/03	70.000	130.000
MS	Barium by ICP-MS	7440-39-3	107.362	% Recov	05/08/03	70.000	130.000
MS	Beryllium by ICP-MS	7440-41-7	104.294	% Recov	05/08/03	70.000	130.000
MS	Cadmium by ICP-MS	7440-43-9	98.671	% Recov	05/08/03	70.000	130.000
MS	Cobalt by ICP-MS	7440-48-4	103.272	% Recov	05/08/03	70.000	130.000
MS	Chromium by ICP-MS	7440-47-3	102.761	% Recov	05/08/03	70.000	130.000
MS	Copper by ICP-MS	7440-50-8	105.317	% Recov	05/08/03	70.000	130.000
MS	Mercury by ICP-MS	7439-97-6	95.092	% Recov	05/08/03	70.000	130.000
MS	Manganese by ICP-MS	7439-96-5	96.115	% Recov	05/08/03	70.000	130.000
MS	Molybdenum by ICP-MS	7439-98-7	94.070	% Recov	05/08/03	70.000	130.000
MS	Nickel by ICP-MS	7440-02-0	104.806	% Recov	05/08/03	70.000	130.000
MS	Lead by ICP-MS	7439-92-1	96.115	% Recov	05/08/03	70.000	130.000
MS	Antimony by ICP-MS	7440-36-0	106.851	% Recov	05/08/03	70.000	130.000
MS	Selenium by ICP-MS	7782-49-2	93.558	% Recov	05/08/03	70.000	130.000
MS	Thorium by ICP-MS	7440-29-1	100.204	% Recov	05/08/03	70.000	130.000
MS	Thallium by ICP-MS	7440-28-0	89.980	% Recov	05/08/03	70.000	130.000
MS	Uranium by ICP-MS	7440-61-1	94.070	% Recov	05/08/03	70.000	130.000
MS	Vanadium by ICP-MS	7440-62-2	106.339	% Recov	05/08/03	70.000	130.000
MS	Zinc by ICP-MS	7440-66-6	102.761	% Recov	05/08/03	70.000	130.000
MSD	Silver by ICP-MS	7440-22-4	88.110	% Recov	05/08/03	70.000	130.000
MSD	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/08/03	70.000	130.000
MSD	Arsenic by ICP-MS	7440-38-2	98.195	% Recov	05/08/03	70.000	130.000
MSD	Barium by ICP-MS	7440-39-3	109.873	% Recov	05/08/03	70.000	130.000
MSD	Beryllium by ICP-MS	7440-41-7	99.788	% Recov	05/08/03	70.000	130.000
MSD	Cadmium by ICP-MS	7440-43-9	97.134	% Recov	05/08/03	70.000	130.000
MSD	Cobalt by ICP-MS	7440-48-4	101.380	% Recov	05/08/03	70.000	130.000
MSD	Chromium by ICP-MS	7440-47-3	101.911	% Recov	05/08/03	70.000	130.000
MSD	Copper by ICP-MS	7440-50-8	100.318	% Recov	05/08/03	70.000	130.000
MSD	Mercury by ICP-MS	7439-97-6	93.737	% Recov	05/08/03	70.000	130.000
MSD	Manganese by ICP-MS	7439-96-5	82.803	% Recov	05/08/03	70.000	130.000
MSD	Molybdenum by ICP-MS	7439-98-7	92.887	% Recov	05/08/03	70.000	130.000
MSD	Nickel by ICP-MS	7440-02-0	104.034	% Recov	05/08/03	70.000	130.000
MSD	Lead by ICP-MS	7439-92-1	95.011	% Recov	05/08/03	70.000	130.000
MSD	Antimony by ICP-MS	7440-36-0	105.626	% Recov	05/08/03	70.000	130.000
MSD	Selenium by ICP-MS	7782-49-2	95.011	% Recov	05/08/03	70.000	130.000
MSD	Thorium by ICP-MS	7440-29-1	98.726	% Recov	05/08/03	70.000	130.000
MSD	Thallium by ICP-MS	7440-28-0	89.172	% Recov	05/08/03	70.000	130.000
MSD	Uranium by ICP-MS	7440-61-1	92.357	% Recov	05/08/03	70.000	130.000
MSD	Vanadium by ICP-MS	7440-62-2	100.849	% Recov	05/08/03	70.000	130.000
MSD	Zinc by ICP-MS	7440-66-6	100.318	% Recov	05/08/03	70.000	130.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: ICP-2008 MS All possible metal

SAF Number: F03-006  
 Sample Date: 04/17/03  
 Receive Date: 04/17/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000236</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	Silver by ICP-MS	7440-22-4	91.972	% Recov	05/08/03	70.000	130.000
MS	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	06/08/03	70.000	130.000
MS	Arsenic by ICP-MS	7440-38-2	95.020	% Recov	05/08/03	70.000	130.000
MS	Barium by ICP-MS	7440-39-3	105.183	% Recov	05/08/03	70.000	130.000
MS	Beryllium by ICP-MS	7440-41-7	101.118	% Recov	05/08/03	70.000	130.000
MS	Cadmium by ICP-MS	7440-43-9	99.593	% Recov	06/08/03	70.000	130.000
MS	Cobalt by ICP-MS	7440-48-4	101.626	% Recov	05/08/03	70.000	130.000
MS	Chromium by ICP-MS	7440-47-3	101.626	% Recov	05/08/03	70.000	130.000
MS	Copper by ICP-MS	7440-50-8	102.642	% Recov	05/08/03	70.000	130.000
MS	Mercury by ICP-MS	7439-97-6	94.715	% Recov	05/08/03	70.000	130.000
MS	Manganese by ICP-MS	7439-96-5	104.675	% Recov	05/08/03	70.000	130.000
MS	Molybdenum by ICP-MS	7439-98-7	91.463	% Recov	05/08/03	70.000	130.000
MS	Nickel by ICP-MS	7440-02-0	105.691	% Recov	05/08/03	70.000	130.000
MS	Lead by ICP-MS	7439-92-1	96.020	% Recov	06/08/03	70.000	130.000
MS	Antimony by ICP-MS	7440-36-0	96.037	% Recov	05/08/03	70.000	130.000
MS	Selenium by ICP-MS	7782-49-2	90.955	% Recov	05/08/03	70.000	130.000
MS	Thorium by ICP-MS	7440-29-1	100.102	% Recov	05/08/03	70.000	130.000
MS	Thallium by ICP-MS	7440-28-0	89.431	% Recov	05/08/03	70.000	130.000
MS	Uranium by ICP-MS	7440-61-1	94.004	% Recov	05/08/03	70.000	130.000
MS	Vanadium by ICP-MS	7440-62-2	106.707	% Recov	05/08/03	70.000	130.000
MS	Zinc by ICP-MS	7440-66-6	100.102	% Recov	05/08/03	70.000	130.000
MSD	Silver by ICP-MS	7440-22-4	94.792	% Recov	05/08/03	70.000	130.000
MSD	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/08/03	70.000	130.000
MSD	Arsenic by ICP-MS	7440-38-2	92.188	% Recov	05/08/03	70.000	130.000
MSD	Barium by ICP-MS	7440-39-3	101.042	% Recov	05/08/03	70.000	130.000
MSD	Beryllium by ICP-MS	7440-41-7	98.958	% Recov	05/08/03	70.000	130.000
MSD	Cadmium by ICP-MS	7440-43-9	96.354	% Recov	05/08/03	70.000	130.000
MSD	Cobalt by ICP-MS	7440-48-4	101.042	% Recov	05/08/03	70.000	130.000
MSD	Chromium by ICP-MS	7440-47-3	100.000	% Recov	05/08/03	70.000	130.000
MSD	Copper by ICP-MS	7440-50-8	100.000	% Recov	05/08/03	70.000	130.000
MSD	Mercury by ICP-MS	7439-97-6	93.125	% Recov	05/08/03	70.000	130.000
MSD	Manganese by ICP-MS	7439-96-5	98.438	% Recov	05/08/03	70.000	130.000
MSD	Molybdenum by ICP-MS	7439-98-7	88.021	% Recov	05/08/03	70.000	130.000
MSD	Nickel by ICP-MS	7440-02-0	102.083	% Recov	05/08/03	70.000	130.000
MSD	Lead by ICP-MS	7439-92-1	94.271	% Recov	05/08/03	70.000	130.000
MSD	Antimony by ICP-MS	7440-36-0	93.229	% Recov	05/08/03	70.000	130.000
MSD	Selenium by ICP-MS	7782-49-2	90.104	% Recov	05/08/03	70.000	130.000
MSD	Thorium by ICP-MS	7440-29-1	98.438	% Recov	05/08/03	70.000	130.000
MSD	Thallium by ICP-MS	7440-28-0	88.021	% Recov	05/08/03	70.000	130.000
MSD	Uranium by ICP-MS	7440-61-1	91.146	% Recov	05/08/03	70.000	130.000
MSD	Vanadium by ICP-MS	7440-62-2	104.688	% Recov	05/08/03	70.000	130.000
MSD	Zinc by ICP-MS	7440-66-6	101.042	% Recov	05/08/03	70.000	130.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: ICP-2008 MS All possible metal

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
Lab ID:	W030000246						
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	Silver by ICP-MS	7440-22-4	92.369	% Recov	05/08/03	70.000	130.000
MS	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/08/03	70.000	130.000
MS	Arsenic by ICP-MS	7440-38-2	90.361	% Recov	05/08/03	70.000	130.000
MS	Barium by ICP-MS	7440-39-3	95.382	% Recov	05/08/03	70.000	130.000
MS	Beryllium by ICP-MS	7440-41-7	97.390	% Recov	05/08/03	70.000	130.000
MS	Cadmium by ICP-MS	7440-43-9	94.880	% Recov	05/08/03	70.000	130.000
MS	Cobalt by ICP-MS	7440-48-4	102.912	% Recov	05/08/03	70.000	130.000
MS	Chromium by ICP-MS	7440-47-3	102.410	% Recov	05/08/03	70.000	130.000
MS	Copper by ICP-MS	7440-50-8	102.912	% Recov	05/08/03	70.000	130.000
MS	Mercury by ICP-MS	7439-97-6	87.751	% Recov	05/08/03	70.000	130.000
MS	Manganese by ICP-MS	7439-96-5	76.807	% Recov	05/08/03	70.000	130.000
MS	Molybdenum by ICP-MS	7439-98-7	86.345	% Recov	05/08/03	70.000	130.000
MS	Nickel by ICP-MS	7440-02-0	103.414	% Recov	05/08/03	70.000	130.000
MS	Lead by ICP-MS	7439-92-1	90.863	% Recov	05/08/03	70.000	130.000
MS	Antimony by ICP-MS	7440-36-0	96.898	% Recov	05/08/03	70.000	130.000
MS	Selenium by ICP-MS	7782-49-2	88.353	% Recov	05/08/03	70.000	130.000
MS	Thorium by ICP-MS	7440-29-1	95.382	% Recov	05/08/03	70.000	130.000
MS	Thallium by ICP-MS	7440-28-0	85.341	% Recov	05/08/03	70.000	130.000
MS	Uranium by ICP-MS	7440-61-1	89.357	% Recov	05/08/03	70.000	130.000
MS	Vanadium by ICP-MS	7440-62-2	105.422	% Recov	05/08/03	70.000	130.000
MS	Zinc by ICP-MS	7440-66-6	97.892	% Recov	05/08/03	70.000	130.000
MSD	Silver by ICP-MS	7440-22-4	90.081	% Recov	05/08/03	70.000	130.000
MSD	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/08/03	70.000	130.000
MSD	Arsenic by ICP-MS	7440-38-2	93.117	% Recov	05/08/03	70.000	130.000
MSD	Barium by ICP-MS	7440-39-3	93.623	% Recov	05/08/03	70.000	130.000
MSD	Beryllium by ICP-MS	7440-41-7	101.215	% Recov	05/08/03	70.000	130.000
MSD	Cadmium by ICP-MS	7440-43-9	95.648	% Recov	05/08/03	70.000	130.000
MSD	Cobalt by ICP-MS	7440-48-4	102.733	% Recov	05/08/03	70.000	130.000
MSD	Chromium by ICP-MS	7440-47-3	102.227	% Recov	05/08/03	70.000	130.000
MSD	Copper by ICP-MS	7440-50-8	102.227	% Recov	05/08/03	70.000	130.000
MSD	Mercury by ICP-MS	7439-97-6	92.004	% Recov	05/08/03	70.000	130.000
MSD	Manganese by ICP-MS	7439-96-5	82.996	% Recov	05/08/03	70.000	130.000
MSD	Molybdenum by ICP-MS	7439-98-7	89.576	% Recov	05/08/03	70.000	130.000
MSD	Nickel by ICP-MS	7440-02-0	107.794	% Recov	05/08/03	70.000	130.000
MSD	Lead by ICP-MS	7439-92-1	92.105	% Recov	05/08/03	70.000	130.000
MSD	Antimony by ICP-MS	7440-36-0	97.672	% Recov	05/08/03	70.000	130.000
MSD	Selenium by ICP-MS	7782-49-2	89.069	% Recov	05/08/03	70.000	130.000
MSD	Thorium by ICP-MS	7440-29-1	97.572	% Recov	05/08/03	70.000	130.000
MSD	Thallium by ICP-MS	7440-28-0	87.551	% Recov	05/08/03	70.000	130.000
MSD	Uranium by ICP-MS	7440-61-1	90.587	% Recov	05/08/03	70.000	130.000
MSD	Vanadium by ICP-MS	7440-62-2	107.287	% Recov	05/08/03	70.000	130.000
MSD	Zinc by ICP-MS	7440-66-6	98.684	% Recov	05/08/03	70.000	130.000

Lab ID: W030000265

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: ICP-2008 MS All possible metal

SAF Number: F03-006  
 Sample Date: 04/30/03  
 Receive Date: 04/30/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	Silver by ICP-MS	7440-22-4	87.449	% Recov	05/08/03	70.000	130.000
MS	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/08/03	70.000	130.000
MS	Arsenic by ICP-MS	7440-38-2	91.564	% Recov	05/08/03	70.000	130.000
MS	Barium by ICP-MS	7440-39-3	109.568	% Recov	05/08/03	70.000	130.000
MS	Beryllium by ICP-MS	7440-41-7	100.309	% Recov	05/08/03	70.000	130.000
MS	Cadmium by ICP-MS	7440-43-9	98.766	% Recov	05/08/03	70.000	130.000
MS	Cobalt by ICP-MS	7440-48-4	101.852	% Recov	05/08/03	70.000	130.000
MS	Chromium by ICP-MS	7440-47-3	100.823	% Recov	05/08/03	70.000	130.000
MS	Copper by ICP-MS	7440-50-8	101.337	% Recov	05/08/03	70.000	130.000
MS	Mercury by ICP-MS	7439-97-6	90.536	% Recov	05/08/03	70.000	130.000
MS	Manganese by ICP-MS	7439-96-5	127.058	% Recov	05/08/03	70.000	130.000
MS	Molybdenum by ICP-MS	7439-98-7	86.934	% Recov	05/08/03	70.000	130.000
MS	Nickel by ICP-MS	7440-02-0	103.395	% Recov	05/08/03	70.000	130.000
MS	Lead by ICP-MS	7439-92-1	93.621	% Recov	05/08/03	70.000	130.000
MS	Antimony by ICP-MS	7440-36-0	86.934	% Recov	05/08/03	70.000	130.000
MS	Selenium by ICP-MS	7782-49-2	89.506	% Recov	05/08/03	70.000	130.000
MS	Thorium by ICP-MS	7440-29-1	97.222	% Recov	05/08/03	70.000	130.000
MS	Thallium by ICP-MS	7440-28-0	87.449	% Recov	05/08/03	70.000	130.000
MS	Uranium by ICP-MS	7440-61-1	91.049	% Recov	05/08/03	70.000	130.000
MS	Vanadium by ICP-MS	7440-62-2	107.510	% Recov	05/08/03	70.000	130.000
MS	Zinc by ICP-MS	7440-66-6	99.280	% Recov	05/08/03	70.000	130.000
MSD	Silver by ICP-MS	7440-22-4	83.506	% Recov	05/08/03	70.000	130.000
MSD	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/08/03	70.000	130.000
MSD	Arsenic by ICP-MS	7440-38-2	93.361	% Recov	05/08/03	70.000	130.000
MSD	Barium by ICP-MS	7440-39-3	102.697	% Recov	05/08/03	70.000	130.000
MSD	Beryllium by ICP-MS	7440-41-7	99.585	% Recov	05/08/03	70.000	130.000
MSD	Cadmium by ICP-MS	7440-43-9	98.029	% Recov	05/08/03	70.000	130.000
MSD	Cobalt by ICP-MS	7440-48-4	101.660	% Recov	05/08/03	70.000	130.000
MSD	Chromium by ICP-MS	7440-47-3	102.178	% Recov	05/08/03	70.000	130.000
MSD	Copper by ICP-MS	7440-50-8	99.585	% Recov	05/08/03	70.000	130.000
MSD	Mercury by ICP-MS	7439-97-6	90.871	% Recov	05/08/03	70.000	130.000
MSD	Manganese by ICP-MS	7439-96-5	98.548	% Recov	05/08/03	70.000	130.000
MSD	Molybdenum by ICP-MS	7439-98-7	87.656	% Recov	05/08/03	70.000	130.000
MSD	Nickel by ICP-MS	7440-02-0	102.178	% Recov	05/08/03	70.000	130.000
MSD	Lead by ICP-MS	7439-92-1	91.286	% Recov	05/08/03	70.000	130.000
MSD	Antimony by ICP-MS	7440-36-0	86.581	% Recov	05/08/03	70.000	130.000
MSD	Selenium by ICP-MS	7782-49-2	89.730	% Recov	05/08/03	70.000	130.000
MSD	Thorium by ICP-MS	7440-29-1	95.436	% Recov	05/08/03	70.000	130.000
MSD	Thallium by ICP-MS	7440-28-0	86.618	% Recov	05/08/03	70.000	130.000
MSD	Uranium by ICP-MS	7440-61-1	89.212	% Recov	05/08/03	70.000	130.000
MSD	Vanadium by ICP-MS	7440-62-2	106.328	% Recov	05/08/03	70.000	130.000
MSD	Zinc by ICP-MS	7440-66-6	98.992	% Recov	05/08/03	70.000	130.000

## BATCH QC

BLANK	Silver by ICP-MS	7440-22-4	<0.200	ug/L	05/08/03	-0.440	0.440
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# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: F03-006

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
BLANK	Silver by ICP-MS	7440-22-4	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Silver by ICP-MS	7440-22-4	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Silver by ICP-MS	7440-22-4	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Aluminum by ICP-MS	7429-90-5	<11.0	ug/L	05/08/03	-24.200	24.200
BLANK	Aluminum by ICP-MS	7429-90-5	<11.0	ug/L	05/08/03	-24.200	24.200
BLANK	Aluminum by ICP-MS	7429-90-5	<11.0	ug/L	05/08/03	-24.200	24.200
BLANK	Aluminum by ICP-MS	7429-90-5	<11.0	ug/L	05/08/03	-24.200	24.200
BLANK	Arsenic by ICP-MS	7440-38-2	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Arsenic by ICP-MS	7440-38-2	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Arsenic by ICP-MS	7440-38-2	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Barium by ICP-MS	7440-39-3	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Barium by ICP-MS	7440-39-3	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Barium by ICP-MS	7440-39-3	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Beryllium by ICP-MS	7440-41-7	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Beryllium by ICP-MS	7440-41-7	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Beryllium by ICP-MS	7440-41-7	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Cadmium by ICP-MS	7440-43-9	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Cadmium by ICP-MS	7440-43-9	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Cadmium by ICP-MS	7440-43-9	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Cobalt by ICP-MS	7440-48-4	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Cobalt by ICP-MS	7440-48-4	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Cobalt by ICP-MS	7440-48-4	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Cobalt by ICP-MS	7440-48-4	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Chromium by ICP-MS	7440-47-3	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Chromium by ICP-MS	7440-47-3	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Chromium by ICP-MS	7440-47-3	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Chromium by ICP-MS	7440-47-3	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Copper by ICP-MS	7440-50-8	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Copper by ICP-MS	7440-50-8	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Copper by ICP-MS	7440-50-8	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Copper by ICP-MS	7440-50-8	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Copper by ICP-MS	7440-50-8	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Mercury by ICP-MS	7439-97-6	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Mercury by ICP-MS	7439-97-6	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Mercury by ICP-MS	7439-97-6	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Mercury by ICP-MS	7439-97-6	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Manganese by ICP-MS	7439-96-5	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Manganese by ICP-MS	7439-96-5	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Manganese by ICP-MS	7439-96-5	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Manganese by ICP-MS	7439-96-5	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Molybdenum by ICP-MS	7439-98-7	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Molybdenum by ICP-MS	7439-98-7	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Molybdenum by ICP-MS	7439-98-7	<0.300	ug/L	05/08/03	-0.660	0.660

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: F03-006

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
BLANK	Molybdenum by ICP-MS	7439-98-7	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Nickel by ICP-MS	7440-02-0	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Nickel by ICP-MS	7440-02-0	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Nickel by ICP-MS	7440-02-0	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Lead by ICP-MS	7439-92-1	<1.20	ug/L	05/08/03	-2.640	2.640
BLANK	Lead by ICP-MS	7439-92-1	<1.20	ug/L	05/08/03	-2.640	2.640
BLANK	Lead by ICP-MS	7439-92-1	<1.20	ug/L	05/08/03	-2.640	2.640
BLANK	Antimony by ICP-MS	7440-36-0	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Antimony by ICP-MS	7440-36-0	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Antimony by ICP-MS	7440-36-0	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Antimony by ICP-MS	7440-36-0	<0.500	ug/L	05/08/03	-1.100	1.100
BLANK	Selenium by ICP-MS	7782-49-2	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Selenium by ICP-MS	7782-49-2	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Selenium by ICP-MS	7782-49-2	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Selenium by ICP-MS	7782-49-2	<0.300	ug/L	05/08/03	-0.660	0.660
BLANK	Thorium by ICP-MS	7440-29-1	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Thorium by ICP-MS	7440-29-1	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Thorium by ICP-MS	7440-29-1	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Thorium by ICP-MS	7440-29-1	<0.200	ug/L	05/08/03	-0.440	0.440
BLANK	Thallium by ICP-MS	7440-28-0	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Thallium by ICP-MS	7440-28-0	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Thallium by ICP-MS	7440-28-0	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Thallium by ICP-MS	7440-28-0	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Uranium by ICP-MS	7440-61-1	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Uranium by ICP-MS	7440-61-1	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Uranium by ICP-MS	7440-61-1	<0.100	ug/L	05/08/03	-0.220	0.220
BLANK	Vanadium by ICP-MS	7440-62-2	<0.400	ug/L	05/08/03	-0.880	0.880
BLANK	Vanadium by ICP-MS	7440-62-2	<0.400	ug/L	05/08/03	-0.880	0.880
BLANK	Vanadium by ICP-MS	7440-62-2	<0.400	ug/L	05/08/03	-0.880	0.880
BLANK	Zinc by ICP-MS	7440-66-6	<4.00	ug/L	05/08/03	-8.800	8.800
BLANK	Zinc by ICP-MS	7440-66-6	<4.00	ug/L	05/08/03	-8.800	8.800
BLANK	Zinc by ICP-MS	7440-66-6	<4.00	ug/L	05/08/03	-8.800	8.800
LCS	Silver by ICP-MS	7440-22-4	142.017	% Recov	05/08/03	85.000	115.000
LCS	Silver by ICP-MS	7440-22-4	143.697	% Recov	05/08/03	85.000	115.000
LCS	Silver by ICP-MS	7440-22-4	144.538	% Recov	05/08/03	85.000	115.000
LCS	Silver by ICP-MS	7440-22-4	152.941	% Recov	05/08/03	85.000	115.000
LCS	Aluminum by ICP-MS	7429-90-5	116.596	% Recov	05/08/03	85.000	115.000
LCS	Aluminum by ICP-MS	7429-90-5	113.617	% Recov	05/08/03	85.000	115.000
LCS	Aluminum by ICP-MS	7429-90-5	113.475	% Recov	05/08/03	85.000	115.000
LCS	Aluminum by ICP-MS	7429-90-5	122.270	% Recov	05/08/03	85.000	115.000
LCS	Arsenic by ICP-MS	7440-38-2	104.615	% Recov	05/08/03	85.000	115.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: F03-006

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
LCS	Arsenic by ICP-MS	7440-38-2	103.590	% Recov	05/08/03	85.000	115.000
LCS	Arsenic by ICP-MS	7440-38-2	106.667	% Recov	05/08/03	85.000	115.000
LCS	Arsenic by ICP-MS	7440-38-2	106.657	% Recov	05/08/03	85.000	115.000
LCS	Barium by ICP-MS	7440-39-3	108.929	% Recov	05/08/03	85.000	115.000
LCS	Barium by ICP-MS	7440-39-3	107.908	% Recov	05/08/03	85.000	115.000
LCS	Barium by ICP-MS	7440-39-3	108.673	% Recov	05/08/03	85.000	115.000
LCS	Barium by ICP-MS	7440-39-3	106.612	% Recov	05/08/03	85.000	115.000
LCS	Beryllium by ICP-MS	7440-41-7	107.039	% Recov	05/08/03	85.000	115.000
LCS	Beryllium by ICP-MS	7440-41-7	108.367	% Recov	05/08/03	85.000	115.000
LCS	Beryllium by ICP-MS	7440-41-7	109.562	% Recov	05/08/03	85.000	115.000
LCS	Beryllium by ICP-MS	7440-41-7	107.437	% Recov	05/08/03	85.000	115.000
LCS	Cadmium by ICP-MS	7440-43-9	110.350	% Recov	05/08/03	85.000	115.000
LCS	Cadmium by ICP-MS	7440-43-9	103.790	% Recov	05/08/03	85.000	115.000
LCS	Cadmium by ICP-MS	7440-43-9	106.997	% Recov	05/08/03	85.000	115.000
LCS	Cadmium by ICP-MS	7440-43-9	107.143	% Recov	05/08/03	85.000	115.000
LCS	Cobalt by ICP-MS	7440-48-4	103.699	% Recov	05/08/03	85.000	115.000
LCS	Cobalt by ICP-MS	7440-48-4	102.775	% Recov	05/08/03	85.000	115.000
LCS	Cobalt by ICP-MS	7440-48-4	105.896	% Recov	05/08/03	85.000	115.000
LCS	Cobalt by ICP-MS	7440-48-4	107.514	% Recov	05/08/03	85.000	115.000
LCS	Chromium by ICP-MS	7440-47-3	105.202	% Recov	05/08/03	85.000	115.000
LCS	Chromium by ICP-MS	7440-47-3	106.936	% Recov	05/08/03	85.000	115.000
LCS	Chromium by ICP-MS	7440-47-3	100.116	% Recov	05/08/03	85.000	115.000
LCS	Chromium by ICP-MS	7440-47-3	100.000	% Recov	05/08/03	85.000	115.000
LCS	Copper by ICP-MS	7440-50-8	103.937	% Recov	05/08/03	85.000	115.000
LCS	Copper by ICP-MS	7440-50-8	104.724	% Recov	05/08/03	85.000	115.000
LCS	Copper by ICP-MS	7440-50-8	108.661	% Recov	05/08/03	85.000	115.000
LCS	Copper by ICP-MS	7440-50-8	108.448	% Recov	05/08/03	85.000	115.000
LCS	Mercury by ICP-MS	7439-97-6	89.054	% Recov	05/08/03	85.000	115.000
LCS	Mercury by ICP-MS	7439-97-6	83.953	% Recov	05/08/03	85.000	115.000
LCS	Mercury by ICP-MS	7439-97-6	86.929	% Recov	05/08/03	85.000	115.000
LCS	Mercury by ICP-MS	7439-97-6	86.397	% Recov	05/08/03	85.000	115.000
LCS	Manganese by ICP-MS	7439-96-5	111.183	% Recov	05/08/03	85.000	115.000
LCS	Manganese by ICP-MS	7439-96-5	114.839	% Recov	05/08/03	85.000	115.000
LCS	Manganese by ICP-MS	7439-96-5	119.570	% Recov	05/08/03	85.000	115.000
LCS	Manganese by ICP-MS	7439-96-5	110.108	% Recov	05/08/03	85.000	115.000
LCS	Molybdenum by ICP-MS	7439-98-7	103.152	% Recov	05/08/03	85.000	115.000
LCS	Molybdenum by ICP-MS	7439-98-7	100.727	% Recov	05/08/03	85.000	115.000
LCS	Molybdenum by ICP-MS	7439-98-7	105.576	% Recov	05/08/03	85.000	115.000
LCS	Molybdenum by ICP-MS	7439-98-7	103.515	% Recov	05/08/03	85.000	115.000
LCS	Nickel by ICP-MS	7440-02-0	114.713	% Recov	05/08/03	85.000	115.000
LCS	Nickel by ICP-MS	7440-02-0	115.431	% Recov	05/08/03	85.000	115.000
LCS	Nickel by ICP-MS	7440-02-0	120.813	% Recov	05/08/03	85.000	115.000
LCS	Nickel by ICP-MS	7440-02-0	118.182	% Recov	05/08/03	85.000	115.000
LCS	Lead by ICP-MS	7439-92-1	105.820	% Recov	05/08/03	85.000	115.000
LCS	Lead by ICP-MS	7439-92-1	102.846	% Recov	05/08/03	85.000	115.000
LCS	Lead by ICP-MS	7439-92-1	106.878	% Recov	05/08/03	85.000	115.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: F03-006

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
LCS	Lead by ICP-MS	7439-92-1	106.878	% Recov	05/08/03	85.000	115.000
LCS	Antimony by ICP-MS	7440-36-0	98.551	% Recov	05/08/03	85.000	115.000
LCS	Antimony by ICP-MS	7440-36-0	101.448	% Recov	05/08/03	85.000	115.000
LCS	Antimony by ICP-MS	7440-36-0	102.174	% Recov	05/08/03	85.000	115.000
LCS	Antimony by ICP-MS	7440-36-0	104.348	% Recov	05/08/03	85.000	115.000
LCS	Selenium by ICP-MS	7782-49-2	107.018	% Recov	05/08/03	85.000	115.000
LCS	Selenium by ICP-MS	7782-49-2	107.895	% Recov	05/08/03	85.000	115.000
LCS	Selenium by ICP-MS	7782-49-2	108.772	% Recov	05/08/03	85.000	115.000
LCS	Selenium by ICP-MS	7782-49-2	109.772	% Recov	05/08/03	85.000	115.000
LCS	Thorium by ICP-MS	7440-29-1	99.227	% Recov	05/08/03	85.000	115.000
LCS	Thorium by ICP-MS	7440-29-1	97.680	% Recov	05/08/03	85.000	115.000
LCS	Thorium by ICP-MS	7440-29-1	95.361	% Recov	05/08/03	85.000	115.000
LCS	Thorium by ICP-MS	7440-29-1	97.165	% Recov	05/08/03	85.000	115.000
LCS	Thallium by ICP-MS	7440-28-0	105.422	% Recov	05/08/03	85.000	115.000
LCS	Thallium by ICP-MS	7440-28-0	102.410	% Recov	05/08/03	85.000	115.000
LCS	Thallium by ICP-MS	7440-28-0	105.422	% Recov	05/08/03	85.000	115.000
LCS	Thallium by ICP-MS	7440-28-0	106.426	% Recov	05/08/03	85.000	115.000
LCS	Uranium by ICP-MS	7440-61-1	95.103	% Recov	05/08/03	85.000	115.000
LCS	Uranium by ICP-MS	7440-61-1	95.103	% Recov	05/08/03	85.000	115.000
LCS	Uranium by ICP-MS	7440-61-1	96.134	% Recov	05/08/03	85.000	115.000
LCS	Uranium by ICP-MS	7440-61-1	90.979	% Recov	05/08/03	85.000	115.000
LCS	Vanadium by ICP-MS	7440-62-2	103.659	% Recov	05/08/03	85.000	115.000
LCS	Vanadium by ICP-MS	7440-62-2	107.317	% Recov	05/08/03	85.000	115.000
LCS	Vanadium by ICP-MS	7440-62-2	107.927	% Recov	05/08/03	85.000	115.000
LCS	Vanadium by ICP-MS	7440-62-2	110.876	% Recov	05/08/03	85.000	115.000
LCS	Zinc by ICP-MS	7440-66-6	113.585	% Recov	05/08/03	85.000	115.000
LCS	Zinc by ICP-MS	7440-66-6	120.377	% Recov	05/08/03	85.000	115.000
LCS	Zinc by ICP-MS	7440-66-6	116.604	% Recov	05/08/03	85.000	115.000
LCS	Zinc by ICP-MS	7440-66-6	112.830	% Recov	05/08/03	85.000	115.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: Anions by Ion Chromatography

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Bromide (Br) by IC	24959-67-9	n/a	RPD	05/16/03	0.000	20.000
DUP	Chloride (Cl) by IC	16887-00-6	n/a	RPD	05/16/03	0.000	20.000
DUP	Fluoride (F) by IC	16984-48-8	16.610	RPD	05/16/03	0.000	20.000
DUP	Nitrite (N) by IC	NO2-N	n/a	RPD	05/16/03	0.000	20.000
DUP	Nitrate (N) by IC	NO3-N	4.455	RPD	05/16/03	0.000	20.000
DUP	Phosphate (P) by IC	14265-44-2	n/a	RPD	05/16/03	0.000	20.000
DUP	Sulfate (SO4) by IC	14808-79-8	12.576	RPD	05/16/03	0.000	20.000
MS	Bromide (Br) by IC	24959-67-9	97.487	% Recov	05/16/03	75.000	125.000
MS	Chloride (Cl) by IC	16887-00-6	100.806	% Recov	05/16/03	75.000	125.000
MS	Fluoride (F) by IC	16984-48-8	104.703	% Recov	05/16/03	75.000	125.000
MS	Nitrite (N) by IC	NO2-N	88.310	% Recov	05/16/03	75.000	125.000
MS	Nitrate (N) by IC	NO3-N	96.188	% Recov	05/16/03	75.000	125.000
MS	Phosphate (P) by IC	14265-44-2	92.179	% Recov	05/16/03	75.000	125.000
MS	Sulfate (SO4) by IC	14808-79-8	98.985	% Recov	05/16/03	75.000	125.000
MSD	Bromide (Br) by IC	24959-67-9	94.975	% Recov	05/16/03	75.000	125.000
MSD	Chloride (Cl) by IC	16887-00-6	99.091	% Recov	05/16/03	75.000	125.000
MSD	Fluoride (F) by IC	16984-48-8	105.317	% Recov	05/16/03	75.000	125.000
MSD	Nitrite (N) by IC	NO2-N	85.913	% Recov	05/16/03	75.000	125.000
MSD	Nitrate (N) by IC	NO3-N	98.881	% Recov	05/16/03	75.000	125.000
MSD	Phosphate (P) by IC	14265-44-2	91.762	% Recov	05/16/03	75.000	125.000
MSD	Sulfate (SO4) by IC	14808-79-8	97.970	% Recov	05/16/03	75.000	125.000

## BATCH QC

BLANK	Bromide (Br) by IC	24959-67-9	< 4.50e-2	mg/L	05/16/03	0.000	300.000
BLANK	Bromide (Br) by IC	24959-67-9	< 4.50e-2	mg/L	05/16/03	0.000	300.000
BLANK	Chloride (Cl) by IC	16887-00-6	< 1.40e-2	mg/L	05/16/03	0.000	300.000
BLANK	Chloride (Cl) by IC	16887-00-6	< 1.40e-2	mg/L	05/16/03	0.000	300.000
BLANK	Fluoride (F) by IC	16984-48-8	< 7.00e-3	mg/L	05/16/03	0.000	300.000
BLANK	Fluoride (F) by IC	16984-48-8	< 7.00e-3	mg/L	05/16/03	0.000	300.000
BLANK	Nitrite (N) by IC	NO2-N	< 9.00e-3	mg/L	05/16/03	0.000	300.000
BLANK	Nitrite (N) by IC	NO2-N	< 8.00e-3	mg/L	05/16/03	0.000	300.000
BLANK	Nitrate (N) by IC	NO3-N	< 5.00e-3	mg/L	05/16/03	0.000	300.000
BLANK	Nitrate (N) by IC	NO3-N	< 5.00e-3	mg/L	05/16/03	0.000	300.000
BLANK	Phosphate (P) by IC	14265-44-2	< 1.30e-2	mg/L	05/16/03	0.000	300.000
BLANK	Phosphate (P) by IC	14265-44-2	< 1.30e-2	mg/L	05/16/03	0.000	300.000
BLANK	Sulfate (SO4) by IC	14808-79-8	< 2.40e-2	mg/L	05/16/03	0.000	300.000
BLANK	Sulfate (SO4) by IC	14808-79-8	< 2.40e-2	mg/L	05/16/03	0.000	300.000
LCS	Bromide (Br) by IC	24959-67-9	100.249	% Recov	05/16/03	80.000	120.000
LCS	Chloride (Cl) by IC	16887-00-6	102.000	% Recov	05/16/03	80.000	120.000
LCS	Fluoride (F) by IC	16984-48-8	108.409	% Recov	05/16/03	80.000	120.000
LCS	Nitrite (N) by IC	NO2-N	90.490	% Recov	05/16/03	80.000	120.000
LCS	Nitrate (N) by IC	NO3-N	98.113	% Recov	05/16/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598

Matrix: SOLID

Test: Anions by Ion Chromatography

SAF Number: F03-006

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
LCS	Phosphate (P) by IC	14265-44-2	100.619	% Recov	05/16/03	80.000	120.000
LCS	Sulfate (SO4) by IC	14808-79-8	102.506	% Recov	05/16/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: Ammonia (N) by IC

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Ammonia (N) by IC	7664-41-7	n/a	RPD	05/16/03	0.000	20.000
MS	Ammonia (N) by IC	7664-41-7	100.606	% Recov	05/16/03	75.000	125.000
MSD	Ammonia (N) by IC	7664-41-7	98.788	% Recov	05/16/03	75.000	125.000

## BATCH QC

BLNK-PREP	Ammonia (N) by IC	7664-41-7	<4.00e-3	Ratio	05/16/03		
BLNK-PREP	Ammonia (N) by IC	7664-41-7	<4.00e-3	Ratio	05/16/03		
LCS	Ammonia (N) by IC	7664-41-7	97.708	% Recov	05/16/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: Uranium Isotopes by AEA

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000246</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
DUP	U-238 by AEA	24678-82-8	19.355	RPD	05/20/03	0.000	20.000

## BATCH QC

BLANK	U-238 by AEA	24678-82-8	1.8e-03	PCG	05/20/03	0.000	1000.000
LCS	U-238 by AEA	24678-82-8	106.400	% Recov	05/20/03	75.000	125.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: Cyanide by Midi/Spectrophotom

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

MS	Cyanide by Midi/Spectrophotom	57-12-5	95.900	% Recov	05/21/03	75.000	125.000
MSD	Cyanide by Midi/Spectrophotom	57-12-5	96.000	% Recov	05/21/03	75.000	125.000
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	11.105	Ratio	05/21/03	0.000	20.000

## BATCH QC

BLANK	Cyanide by Midi/Spectrophotom	57-12-5	1.912	Ratio	05/21/03	-4.000	4.000
BLNK-PREP	Cyanide by Midi/Spectrophotom	57-12-5	0.308	Ratio	05/21/03	-4.000	4.000
DUP	Cyanide by Midi/Spectrophotom	57-12-5	n/a	Ratio	05/21/03	0.000	20.000
LCS	Cyanide by Midi/Spectrophotom	57-12-5	98.090	% Recov	05/21/03	90.000	110.000
LCS-2	Cyanide by Midi/Spectrophotom	57-12-5	n/a	% Recov	05/21/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: NWTPH-GX TPH Gasoline Range

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

MS	Total Pet. Hydrocarbons Gas	TPH-G	96.000	% Recov	05/07/03	50.000	150.000
MSD	Total Pet. Hydrocarbons Gas	TPH-G	94.000	% Recov	05/07/03	50.000	150.000
SPK-RPD	Total Pet. Hydrocarbons Gas	TPH-G	2.105	RPD	05/07/03	0.000	20.000

## BATCH QC

BLANK	Total Pet. Hydrocarbons Gas	TPH-G	<100	mg/L	05/07/03	0.000	300.000
LCS	Total Pet. Hydrocarbons Gas	TPH-G	97.000	% Recov	05/07/03	85.000	115.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: Plutonium Isotopes by AEA

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Pu-239/240 by AEA	PU-239/240	-876.923	RPD	05/20/03	0.000	20.000
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## BATCH QC

BLANK	Pu-239/240 by AEA	PU-239/240	1.9e-03	PCG	05/20/03	0.000	1000.000
LCS	Pu-239/240 by AEA	PU-239/240	96.000	% Recov	05/20/03	75.000	125.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: Americium by AEA

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000246</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
DUP	Am-241 by AEA	14596-10-2	307.317	RPD	05/21/03	0.000	20.000

## BATCH QC

BLANK	Am-241 by AEA	14596-10-2	1.2e-02	PCG	05/20/03	0.000	1000.000
LCS	Am-241 by AEA	14596-10-2	93.000	% Recov	05/20/03	75.000	125.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: Alcohols, Glycols - 8015

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

MS	2-Bromoethanol	540-51-2	87.000	%Recover	05/21/03	70.000	125.000
MS	Diethyl ether	60-29-7	96.000	%Recover	05/21/03	75.000	125.000
MS	Ethylene glycol	107-21-1	60.000	%Recover	05/21/03	75.000	125.000
MS	Methanol	67-56-1	102.000	%Recover	05/21/03	75.000	125.000
MSD	2-Bromoethanol	540-51-2	88.000	%Recover	05/21/03	70.000	125.000
MSD	Diethyl ether	60-29-7	113.000	%Recover	05/21/03	75.000	125.000
MSD	Ethylene glycol	107-21-1	98.000	%Recover	05/21/03	75.000	125.000
MSD	Methanol	67-56-1	94.000	%Recover	05/21/03	75.000	125.000
SPK-RPD	2-Bromoethanol	540-51-2	1.143	RPD	05/21/03	0.000	20.000
SPK-RPD	Diethyl ether	60-29-7	16.268	RPD	05/21/03	0.000	20.000
SPK-RPD	Ethylene glycol	107-21-1	48.154	RPD	05/21/03	0.000	20.000
SPK-RPD	Methanol	67-56-1	8.163	RPD	05/21/03	0.000	20.000

## BATCH QC

BLANK	2-Bromoethanol	540-51-2	98	ug/Kg	05/21/03	0.000	10.000
BLANK	Diethyl ether	60-29-7	<5000	ug/Kg	05/21/03	0.000	10.000
BLANK	Ethylene glycol	107-21-1	<5000	ug/Kg	05/21/03	0.000	6.000
BLANK	Methanol	67-56-1	<1000	ug/Kg	05/21/03	0.000	10.000
LCS	2-Bromoethanol	540-51-2	82.000	%Recover	05/21/03	70.000	130.000
LCS	Diethyl ether	60-29-7	114.000	%Recover	05/21/03	70.000	130.000
LCS	Ethylene glycol	107-21-1	87.000	%Recover	05/21/03	70.000	130.000
LCS	Methanol	67-56-1	97.000	%Recover	05/21/03	70.000	130.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: WTPH-D TPH Diesel Range (Wa)

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

SURR	ortho-Terphenyl	84-15-1	88.000	% Recov	05/21/03	70.000	130.000
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Lab ID: W030000247

## BATCH QC ASSOCIATED WITH SAMPLE

MS	Kerosene	8008-20-6	84.600	% Recov	05/21/03	70.000	130.000
MS	ortho-Terphenyl	84-15-1	83.900	% Recov	05/21/03	70.000	130.000
MSD	Kerosene	8008-20-6	92.800	% Recov	05/21/03	70.000	130.000
MSD	ortho-Terphenyl	84-15-1	98.100	% Recov	05/21/03	70.000	130.000
SPK-RPD	ortho-Terphenyl	84-15-1	15.604	RPD	05/21/03	0.000	20.000
SURR	ortho-Terphenyl	84-15-1	91.900	% Recov	05/21/03	70.000	130.000

Lab ID: W030000248

## BATCH QC ASSOCIATED WITH SAMPLE

SURR	ortho-Terphenyl	84-15-1	90.300	% Recov	05/21/03	70.000	130.000
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## BATCH QC

BLANK	Kerosene	8008-20-6	< 4000	ug/Kg	05/21/03	0.000	100.000
BLANK	ortho-Terphenyl	84-15-1	15990	ug/Kg	05/21/03	70.000	130.000
BLANK	Total Pet. Hydrocarbons Diesel	68476-34-6	< 4000	ug/Kg	05/21/03	0.000	300.000
LCS	ortho-Terphenyl	84-15-1	86.000	% Recov	05/21/03	70.000	130.000
LCS	Total Pet. Hydrocarbons Diesel	68476-34-6	105.000	% Recov	05/21/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: PCBs complete list

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000246  
 BATCH QC ASSOCIATED WITH SAMPLE

SURR	Decachlorobiphenyl	Surr	2051-24-3	96.600	% Recov	05/21/03	50.000	150.000
SURR	Tetrachloro-m-xylene	Surr	877-09-8	88.800	% Recov	05/21/03	50.000	150.000

Lab ID: W030000247  
 BATCH QC ASSOCIATED WITH SAMPLE

MS	Aroclor-1254		11097-69-1	92.700	% Recov	05/21/03	75.000	125.000
MS	Decachlorobiphenyl	Surr	2051-24-3	88.800	% Recov	05/21/03	50.000	150.000
MS	Tetrachloro-m-xylene	Surr	877-09-8	86.000	% Recov	05/21/03	50.000	150.000
MSD	Aroclor-1254		11097-69-1	92.000	% Recov	05/21/03	75.000	125.000
MSD	Decachlorobiphenyl	Surr	2051-24-3	84.800	% Recov	05/21/03	50.000	150.000
MSD	Tetrachloro-m-xylene	Surr	877-09-8	79.300	% Recov	05/21/03	50.000	150.000
SPK-RPD	Aroclor-1254		11097-69-1	0.758	RPD	05/21/03	0.000	25.000
SPK-RPD	Decachlorobiphenyl	Surr	2051-24-3	4.608	RPD	05/21/03	0.000	20.000
SPK-RPD	Tetrachloro-m-xylene	Surr	877-09-8	8.106	RPD	05/21/03	0.000	20.000
SURR	Decachlorobiphenyl	Surr	2051-24-3	93.700	% Recov	05/21/03	50.000	150.000
SURR	Tetrachloro-m-xylene	Surr	877-09-8	83.800	% Recov	05/21/03	50.000	150.000

Lab ID: W030000248  
 BATCH QC ASSOCIATED WITH SAMPLE

SURR	Decachlorobiphenyl	Surr	2051-24-3	86.600	% Recov	05/21/03	50.000	150.000
SURR	Tetrachloro-m-xylene	Surr	877-09-8	79.700	% Recov	05/21/03	50.000	150.000

## BATCH QC

BLANK	Aroclor-1016		12674-11-2	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1221		11104-28-2	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1232		11141-16-5	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1242		53489-21-9	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1248		12672-29-6	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1254		11097-69-1	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1260		11096-82-5	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1262		37324-23-6	< 50	ug/Kg	05/21/03		
BLANK	Aroclor-1268		11100-14-4	< 50	ug/Kg	05/21/03		
BLANK	Decachlorobiphenyl	Surr	2051-24-3	87.000	% Recov	05/21/03	50.000	150.000
BLANK	Tetrachloro-m-xylene	Surr	877-09-8	83.100	% Recov	05/21/03	50.000	150.000
LCS	Aroclor-1254		11097-69-1	90.700	% Recov	05/21/03	70.000	130.000
LCS	Decachlorobiphenyl	Surr	2051-24-3	86.400	% Recov	05/21/03	50.000	150.000
LCS	Tetrachloro-m-xylene	Surr	877-09-8	79.400	% Recov	05/21/03	50.000	150.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: VOA Ground Water Protection

SAF Number: F03-006  
 Sample Date: 04/28/03  
 Receive Date: 04/28/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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Lab ID: W030000236

## BATCH QC ASSOCIATED WITH SAMPLE

MS	1,1-Dichloroethene	75-35-4	102.000	% Recov	05/07/03	63.000	117.000	
MS	Benzene	71-43-2	112.000	% Recov	05/07/03	75.000	129.000	
MS	4-Bromofluorobenzene	Surr	460-00-4	101.000	% Recov	05/07/03	84.000	116.000
MS	Chlorobenzene		108-90-7	112.000	% Recov	05/07/03	79.000	119.000
MS	1,2-Dichloroethane-d4	Surr	17060-07-0	104.000	% Recov	05/07/03	82.000	136.000
MS	Toluene-d8	Surr	2037-26-5	104.000	% Recov	05/07/03	89.000	119.000
MS	Toluene		108-88-3	112.000	% Recov	05/07/03	76.000	120.000
MS	Trichloroethene		79-01-6	112.000	% Recov	05/07/03	73.000	123.000
MSD	1,1-Dichloroethene		75-35-4	92.800	% Recov	05/07/03	63.000	117.000
MSD	Benzene		71-43-2	108.000	% Recov	05/07/03	75.000	129.000
MSD	4-Bromofluorobenzene	Surr	460-00-4	103.000	% Recov	05/07/03	84.000	116.000
MSD	Chlorobenzene		108-90-7	112.000	% Recov	05/07/03	79.000	119.000
MSD	1,2-Dichloroethane-d4	Surr	17060-07-0	108.000	% Recov	05/07/03	82.000	136.000
MSD	Toluene-d8	Surr	2037-26-5	107.000	% Recov	05/07/03	89.000	119.000
MSD	Toluene		108-88-3	110.000	% Recov	05/07/03	76.000	120.000
MSD	Trichloroethene		79-01-6	108.000	% Recov	05/07/03	73.000	123.000

Lab ID: W030000246

## BATCH QC ASSOCIATED WITH SAMPLE

MS	1,1-Dichloroethene		75-35-4	90.000	% Recov	05/07/03	63.000	117.000
MS	Benzene		71-43-2	106.000	% Recov	05/07/03	75.000	129.000
MS	4-Bromofluorobenzene	Surr	460-00-4	99.000	% Recov	05/07/03	84.000	116.000
MS	Chlorobenzene		108-90-7	110.000	% Recov	05/07/03	79.000	119.000
MS	1,2-Dichloroethane-d4	Surr	17060-07-0	110.000	% Recov	05/07/03	82.000	136.000
MS	Toluene-d8	Surr	2037-26-5	100.000	% Recov	05/07/03	89.000	119.000
MS	Toluene		108-88-3	106.000	% Recov	05/07/03	76.000	120.000
MS	Trichloroethene		79-01-6	106.000	% Recov	05/07/03	73.000	123.000
MSD	1,1-Dichloroethene		75-35-4	89.400	% Recov	05/07/03	63.000	117.000
MSD	Benzene		71-43-2	106.000	% Recov	05/07/03	75.000	129.000
MSD	4-Bromofluorobenzene	Surr	460-00-4	98.800	% Recov	05/07/03	84.000	116.000
MSD	Chlorobenzene		108-90-7	108.000	% Recov	05/07/03	78.000	119.000
MSD	1,2-Dichloroethane-d4	Surr	17060-07-0	104.000	% Recov	05/07/03	82.000	136.000
MSD	Toluene-d8	Surr	2037-26-5	104.000	% Recov	05/07/03	89.000	119.000
MSD	Toluene		108-88-3	108.000	% Recov	05/07/03	76.000	120.000
MSD	Trichloroethene		79-01-6	104.000	% Recov	05/07/03	73.000	123.000
SPK-RPD	1,1-Dichloroethene		75-35-4	0.669	RPD	05/07/03	0.000	25.000
SPK-RPD	Benzene		71-43-2	0.000	RPD	05/07/03	0.000	25.000
SPK-RPD	4-Bromofluorobenzene	Surr	460-00-4	0.202	RPD	05/07/03	0.000	25.000
SPK-RPD	Chlorobenzene		108-90-7	1.835	RPD	05/07/03	0.000	25.000
SPK-RPD	1,2-Dichloroethane-d4	Surr	17060-07-0	5.607	RPD	05/07/03	0.000	25.000
SPK-RPD	Toluene-d8	Surr	2037-26-5	3.922	RPD	05/07/03	0.000	25.000
SPK-RPD	Toluene		108-88-3	1.869	RPD	05/07/03	0.000	25.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: VOA Ground Water Protection

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
SPK-RPD	Trichloroethene	79-01-6	1.805	RPD	05/07/03	0.000	25.000	
SURR	4-Bromofluorobenzene	Surr	460-00-4	97.200	% Recov	05/07/03	71.000	125.000
SURR	1,2-Dichloroethane-d4	Surr	17060-07-0	106.000	% Recov	05/07/03	80.000	134.000
SURR	Toluene-d8	Surr	2037-26-5	105.000	% Recov	05/07/03	80.000	126.000

Lab ID: W030000247

## BATCH QC ASSOCIATED WITH SAMPLE

SURR	4-Bromofluorobenzene	Surr	460-00-4	100.000	% Recov	05/07/03	71.000	125.000
SURR	1,2-Dichloroethane-d4	Surr	17060-07-0	108.000	% Recov	05/07/03	80.000	134.000
SURR	Toluene-d8	Surr	2037-26-5	106.000	% Recov	05/07/03	80.000	126.000

Lab ID: W030000248

## BATCH QC ASSOCIATED WITH SAMPLE

SURR	4-Bromofluorobenzene	Surr	460-00-4	103.000	% Recov	05/07/03	71.000	125.000
SURR	1,2-Dichloroethane-d4	Surr	17060-07-0	104.000	% Recov	05/07/03	80.000	134.000
SURR	Toluene-d8	Surr	2037-26-5	104.000	% Recov	05/07/03	80.000	126.000

## BATCH QC

BLANK	1,1-Dichloroethane	75-34-3	< 1.0	ug/Kg	05/07/03			
BLANK	1,1,1-Trichloroethane	71-55-6	< 1.0	ug/Kg	05/07/03			
BLANK	1,1,2-Trichloroethane	79-00-5	< 1.0	ug/Kg	05/07/03			
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	ug/Kg	05/07/03			
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	ug/Kg	05/07/03			
BLANK	1,2-Dichloroethane	107-06-2	< 1.0	ug/Kg	05/07/03			
BLANK	1,2-Dichloroethene (cis & tran)	540-59-0	< 1.0	ug/Kg	05/07/03			
BLANK	1-Butanol	71-36-3	< 10	ug/Kg	05/07/03			
BLANK	2-Hexanone	691-78-6	< 1.0	ug/Kg	05/07/03			
BLANK	2-Pentanone	107-87-9	< 1.0	ug/Kg	05/07/03			
BLANK	4-Methyl-2-pentanone	108-10-1	< 1.0	ug/Kg	05/07/03			
BLANK	Acetone	67-64-1	< 1.0	ug/Kg	05/07/03			
BLANK	Bromodichloromethane	75-27-4	< 1.0	ug/Kg	05/07/03			
BLANK	Benzene	71-43-2	< 1.0	ug/Kg	05/07/03			
BLANK	4-Bromofluorobenzene	Surr	460-00-4	98.000	% Recov	05/07/03	71.000	126.000
BLANK	Bromoform	75-25-2	< 1.0	ug/Kg	05/07/03			
BLANK	n-Butylbenzene	104-51-8	< 1.0	ug/Kg	05/07/03			
BLANK	Carbon Disulfide	75-15-0	< 1.0	ug/Kg	05/07/03			
BLANK	Carbon Tetrachloride	56-23-5	< 1.0	ug/Kg	05/07/03			
BLANK	Dibromochloromethane	124-48-1	< 1.0	ug/Kg	05/07/03			
BLANK	Chloroform	67-66-3	< 1.0	ug/Kg	05/07/03			
BLANK	Chlorobenzene	108-90-7	< 1.0	ug/Kg	05/07/03			
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 1.0	ug/Kg	05/07/03			
BLANK	Chloroethane	75-00-3	< 1.0	ug/Kg	05/07/03			
BLANK	1,2-Dichloroethane-d4	Surr	17060-07-0	102.000	% Recov	05/07/03	80.000	134.000
BLANK	1,2-Dichloropropane	78-87-5	< 1.0	ug/Kg	05/07/03			
BLANK	Ethylbenzene	100-41-4	< 1.0	ug/Kg	05/07/03			
BLANK	Bromomethane	74-83-9	< 1.0	ug/Kg	05/07/03			

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: VOA Ground Water Protection

SAF Number: F03-006  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
BLANK	Chloromethane	74-87-3	< 1.0	ug/Kg	05/07/03			
BLANK	2-Butanone	78-93-3	< 1.0	ug/Kg	05/07/03			
BLANK	Methylene Chloride	75-09-2	< 1.0	ug/Kg	05/07/03			
BLANK	Tetrachloroethene	127-18-4	< 1.0	ug/Kg	05/07/03			
BLANK	Styrene	100-42-5	< 1.0	ug/Kg	05/07/03			
BLANK	Total Xylenes	1330-20-7	< 1.0	ug/Kg	05/07/03	0.000	300.000	
BLANK	Toluene-d8	Surr	2037-26-5	100.000	% Recov	05/07/03	80.000	128.000
BLANK	Toluene	108-88-3	< 1.0	ug/Kg	05/07/03			
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 1.0	ug/Kg	05/07/03			
BLANK	Trichloroethene	79-01-6	< 1.0	ug/Kg	05/07/03			
BLANK	Vinyl Chloride	75-01-4	< 1.0	ug/Kg	05/07/03			
LCS	1,1-Dichloroethene	75-35-4	88.000	% Recov	05/07/03	70.000	130.000	
LCS	Benzene	71-43-2	100.000	% Recov	05/07/03	70.000	130.000	
LCS	4-Bromofluorobenzene	Surr	460-00-4	100.000	% Recov	05/07/03	71.000	125.000
LCS	Chlorobenzene	108-90-7	104.000	% Recov	05/07/03	70.000	130.000	
LCS	1,2-Dichloroethane-d4	Surr	17060-07-0	108.000	% Recov	05/07/03	80.000	134.000
LCS	Toluene-d8	Surr	2037-26-5	102.000	% Recov	05/07/03	80.000	126.000
LCS	Toluene	108-88-3	100.000	% Recov	05/07/03	70.000	130.000	
LCS	Trichloroethene	79-01-6	98.000	% Recov	05/07/03	70.000	130.000	

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000246</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
SURR	2-Fluorophenol	Sur	367-12-4	81.300	% Recov 05/20/03	42.000	105.000
SURR	2-Fluorobiphenyl	Sur	321-60-8	81.300	% Recov 05/20/03	56.000	122.000
SURR	Nitrobenzene-d5	Sur	4165-60-0	78.300	% Recov 05/20/03	64.000	111.000
SURR	Phenol-d5	Sur	4165-62-2	75.300	% Recov 05/20/03	54.000	120.000
SURR	2,4,6-Tribromophenol	Sur	118-79-6	81.300	% Recov 05/20/03	24.000	122.000
SURR	Terphenyl-d14	Sur	98904-43-9	93.300	% Recov 05/20/03	35.000	150.000
<b>Lab ID: W030000247</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	1,2,4-Trichlorobenzene		120-82-1	90.400	% Recov 05/20/03	46.000	107.000
MS	1,4-Dichlorobenzene (SV)		106-46-7	96.400	% Recov 05/20/03	30.000	96.000
MS	2,4-Dinitrotoluene		121-14-2	81.400	% Recov 05/20/03	59.000	106.000
MS	2-Fluorophenol	Sur	367-12-4	93.400	% Recov 05/20/03	42.000	105.000
MS	Acenaphthene		83-32-9	93.400	% Recov 05/20/03	61.000	116.000
MS	4-Chloro-3-methylphenol		59-50-7	92.400	% Recov 05/20/03	61.000	106.000
MS	2-Chlorophenol		95-57-8	92.400	% Recov 05/20/03	66.000	106.000
MS	N-Nitroso-di-n-propylamine		621-64-7	102.000	% Recov 05/20/03	71.000	114.000
MS	2-Fluorobiphenyl	Sur	321-60-8	87.400	% Recov 05/20/03	56.000	122.000
MS	Phenol		108-95-2	92.400	% Recov 05/20/03	42.000	111.000
MS	Nitrobenzene-d5	Sur	4165-60-0	81.400	% Recov 05/20/03	64.000	111.000
MS	4-Nitrophenol		100-02-7	86.400	% Recov 05/20/03	32.000	118.000
MS	Pentachlorophenol		87-86-5	94.400	% Recov 05/20/03	62.000	114.000
MS	Phenol-d5	Sur	4165-62-2	84.400	% Recov 05/20/03	54.000	120.000
MS	Pyrene		129-00-0	93.400	% Recov 05/20/03	66.000	118.000
MS	2,4,6-Tribromophenol	Sur	118-79-6	90.400	% Recov 05/20/03	24.000	122.000
MS	Terphenyl-d14	Sur	98904-43-9	96.400	% Recov 05/20/03	35.000	150.000
MSD	1,2,4-Trichlorobenzene		120-82-1	81.400	% Recov 05/21/03	46.000	107.000
MSD	1,4-Dichlorobenzene (SV)		106-46-7	93.500	% Recov 05/21/03	30.000	96.000
MSD	2,4-Dinitrotoluene		121-14-2	81.400	% Recov 05/21/03	59.000	106.000
MSD	2-Fluorophenol	Sur	367-12-4	90.500	% Recov 05/21/03	42.000	105.000
MSD	Acenaphthene		83-32-9	93.500	% Recov 05/21/03	61.000	116.000
MSD	4-Chloro-3-methylphenol		59-50-7	90.500	% Recov 05/21/03	61.000	106.000
MSD	2-Chlorophenol		95-57-8	90.500	% Recov 05/21/03	66.000	106.000
MSD	N-Nitroso-di-n-propylamine		621-64-7	90.500	% Recov 05/21/03	71.000	114.000
MSD	2-Fluorobiphenyl	Sur	321-60-8	84.500	% Recov 05/21/03	56.000	122.000
MSD	Phenol		108-95-2	90.500	% Recov 05/21/03	42.000	111.000
MSD	Nitrobenzene-d5	Sur	4165-60-0	81.400	% Recov 05/21/03	64.000	111.000
MSD	4-Nitrophenol		100-02-7	86.500	% Recov 05/21/03	32.000	118.000
MSD	Pentachlorophenol		87-86-5	92.500	% Recov 05/21/03	62.000	114.000
MSD	Phenol-d5	Sur	4165-62-2	84.500	% Recov 05/21/03	54.000	120.000
MSD	Pyrene		129-00-0	93.500	% Recov 05/21/03	66.000	118.000
MSD	2,4,6-Tribromophenol	Sur	118-79-6	90.500	% Recov 05/21/03	24.000	122.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-006  
 Sample Date: 04/29/03  
 Receive Date: 04/29/03

QC Type	Analyte		CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
MSD	Terphenyl-d14	Surr	98904-43-9	99.500	%Recover	05/21/03	35.000	150.000
SPK-RPD	1,2,4-Trichlorobenzene		120-82-1	10.477	RPD	05/21/03	0.000	20.000
SPK-RPD	1,4-Dichlorobenzene (SV)		106-46-7	3.054	RPD	05/21/03	0.000	20.000
SPK-RPD	2,4-Dinitrotoluene		121-14-2	0.000	RPD	05/21/03	0.000	20.000
SPK-RPD	2-Fluorophenol	Surr	367-12-4	96.895	%Recover	05/21/03	42.000	106.000
SPK-RPD	Acenaphthene		83-32-9	0.107	RPD	05/21/03	0.000	20.000
SPK-RPD	4-Chloro-3-methylphenol		69-50-7	2.078	RPD	05/21/03	0.000	20.000
SPK-RPD	2-Chlorophenol		95-57-8	2.078	RPD	05/21/03	0.000	20.000
SPK-RPD	N-Nitroso-di-n-propylamine		621-64-7	11.948	RPD	05/21/03	0.000	20.000
SPK-RPD	2-Fluorobiphenyl	Surr	321-60-8	96.682	%Recover	05/21/03	56.000	122.000
SPK-RPD	Phenol		108-95-2	2.078	RPD	05/21/03	0.000	20.000
SPK-RPD	Nitrobenzene-d5	Surr	4165-60-0	100.000	%Recover	05/21/03	64.000	111.000
SPK-RPD	4-Nitrophenol		100-02-7	0.116	RPD	05/21/03	0.000	20.000
SPK-RPD	Pentachlorophenol		87-86-5	2.033	RPD	05/21/03	0.000	20.000
SPK-RPD	Phenol-d5	Surr	4165-62-2	100.118	%Recover	05/21/03	54.000	120.000
SPK-RPD	Pyrene		129-00-0	0.107	RPD	05/21/03	0.000	20.000
SPK-RPD	2,4,6-Tribromophenol	Surr	118-79-6	100.111	%Recover	05/21/03	24.000	122.000
SPK-RPD	Terphenyl-d14	Surr	98904-43-9	103.216	%Recover	05/21/03	35.000	150.000
SURR	2-Fluorophenol	Surr	367-12-4	90.200	%Recover	05/20/03	42.000	106.000
SURR	2-Fluorobiphenyl	Surr	321-60-8	96.200	%Recover	05/20/03	56.000	122.000
SURR	Nitrobenzene-d5	Surr	4165-60-0	78.200	%Recover	05/20/03	64.000	111.000
SURR	Phenol-d5	Surr	4165-62-2	81.200	%Recover	05/20/03	54.000	120.000
SURR	2,4,6-Tribromophenol	Surr	118-79-6	81.200	%Recover	05/20/03	24.000	122.000
SURR	Terphenyl-d14	Surr	98904-43-9	96.200	%Recover	05/20/03	35.000	150.000

Lab ID: W030000248

## BATCH QC ASSOCIATED WITH SAMPLE

SURR	2-Fluorophenol	Surr	367-12-4	81.400	%Recover	05/21/03	42.000	105.000
SURR	2-Fluorobiphenyl	Surr	321-60-8	99.500	%Recover	05/21/03	56.000	122.000
SURR	Nitrobenzene-d5	Surr	4165-60-0	78.400	%Recover	05/21/03	64.000	111.000
SURR	Phenol-d5	Surr	4165-62-2	90.500	%Recover	05/21/03	54.000	120.000
SURR	2,4,6-Tribromophenol	Surr	118-79-6	87.400	%Recover	05/21/03	24.000	122.000
SURR	Terphenyl-d14	Surr	98904-43-9	99.500	%Recover	05/21/03	35.000	150.000

## BATCH QC

BLANK	1,2-Dichlorobenzene (SV)		95-50-1	< 360	ug/Kg	05/20/03		
BLANK	1,2,4-Trichlorobenzene		120-82-1	< 290	ug/Kg	05/20/03		
BLANK	1,3-Dichlorobenzene		541-73-1	< 320	ug/Kg	05/20/03		
BLANK	1,4-Dichlorobenzene (SV)		106-46-7	< 310	ug/Kg	05/20/03		
BLANK	2,4-Dichlorophenol		120-83-2	< 80	ug/Kg	05/20/03		
BLANK	2,4-Dinitrotoluene		121-14-2	< 67	ug/Kg	05/20/03		
BLANK	2,4,5-Trichlorophenol		95-95-4	< 73	ug/Kg	05/20/03		
BLANK	2,4,6-Trichlorophenol		88-06-2	< 67	ug/Kg	05/20/03		
BLANK	2,4-Dimethylphenol		105-67-9	< 67	ug/Kg	05/20/03		
BLANK	2,6-Dinitrotoluene		606-20-2	< 67	ug/Kg	05/20/03		
BLANK	2-Butoxyethanol		111-76-2	< 100	ug/Kg	05/20/03		

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-006  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
BLANK	2-Chloronaphthalene	91-58-7	< 80	ug/Kg	05/20/03		
BLANK	2-Fluorophenol Surrogate	367-12-4	87.000	%Recover	05/20/03	42.000	105.000
BLANK	2-Methylnaphthalene	91-57-6	< 180	ug/Kg	05/20/03		
BLANK	2-Methylphenol	95-48-7	< 67	ug/Kg	05/20/03		
BLANK	2-Nitroaniline	88-74-4	< 67	ug/Kg	05/20/03		
BLANK	2-Nitrophenol	88-75-5	< 170	ug/Kg	05/20/03		
BLANK	3 & 4 Methylphenol Total	108-39-4	< 110	ug/Kg	05/20/03	0.000	300.000
BLANK	3-Nitroaniline	99-09-2	< 67	ug/Kg	05/20/03		
BLANK	4,6-Dinitro-2-methylphenol	534-52-1	< 670	ug/Kg	05/20/03		
BLANK	4-Bromophenyl-phenylether	101-55-3	< 67	ug/Kg	05/20/03		
BLANK	4-Chlorophenyl-phenylether	7005-72-3	< 67	ug/Kg	05/20/03		
BLANK	Acenaphthene	83-32-9	< 67	ug/Kg	05/20/03		
BLANK	Acenaphthylene	208-98-8	< 80	ug/Kg	05/20/03		
BLANK	Anthracene	120-12-7	< 67	ug/Kg	05/20/03		
BLANK	bis-(2-Chloroethyl)Eth	111-44-4	< 250	ug/Kg	05/20/03		
BLANK	Benz(a)anthracene	56-55-3	< 67	ug/Kg	05/20/03		
BLANK	Benz(b)fluoranthene	205-99-2	< 67	ug/Kg	05/20/03		
BLANK	Benz(g,h,i)perylene	191-24-2	< 67	ug/Kg	05/20/03		
BLANK	Benz(a)pyrene	50-32-8	< 67	ug/Kg	05/20/03		
BLANK	bis(2-Chloroethoxy)methane	111-91-1	< 110	ug/Kg	05/20/03		
BLANK	Bis (2-Ethylhexyl) phthalate	117-81-7	< 560	ug/Kg	05/20/03		
BLANK	Bis(2-Chloro-1-methylene)	108-60-1	< 250	ug/Kg	05/20/03	0.000	10.000
BLANK	Benzyl alcohol	100-51-6	< 73	ug/Kg	05/20/03		
BLANK	Benz(k)fluoranthene	207-08-9	< 67	ug/Kg	05/20/03		
BLANK	Butylbenzylphthalate	85-68-7	< 67	ug/Kg	05/20/03		
BLANK	Carbazole	86-74-8	< 80	ug/Kg	05/20/03		
BLANK	4-Chloroaniline	106-47-8	< 93	ug/Kg	05/20/03		
BLANK	4-Chloro-3-methylphenol	59-50-7	< 67	ug/Kg	05/20/03		
BLANK	2-Chlorophenol	95-57-8	< 150	ug/Kg	05/20/03		
BLANK	Chrysene	218-01-9	< 67	ug/Kg	05/20/03		
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 80	ug/Kg	05/20/03		
BLANK	Dibenz(a,h)anthracene	53-70-3	< 67	ug/Kg	05/20/03		
BLANK	Dibenzofuran	132-64-9	< 67	ug/Kg	05/20/03		
BLANK	Di-n-butylphthalate	84-74-2	< 87	ug/Kg	05/20/03		
BLANK	Diethylphthalate	84-66-2	630	ug/Kg	05/20/03		
BLANK	Dimethylphthalate	131-11-3	< 67	ug/Kg	05/20/03		
BLANK	2,4-Dinitrophenol	51-28-6	< 670	ug/Kg	05/20/03		
BLANK	Di-n-octylphthalate	117-84-0	< 67	ug/Kg	05/20/03		
BLANK	N-Nitroso-di-n-propylamine	621-64-7	< 67	ug/Kg	05/20/03		
BLANK	2-Fluorobiphenyl Surrogate	321-60-8	84.000	%Recover	05/20/03	56.000	122.000
BLANK	Fluorene	86-73-7	< 67	ug/Kg	05/20/03		
BLANK	Fluoranthene	206-44-0	< 67	ug/Kg	05/20/03		
BLANK	Hexachlorobenzene	118-74-1	< 67	ug/Kg	05/20/03		
BLANK	Hexachlorobutadiene	87-68-3	< 370	ug/Kg	05/20/03		
BLANK	Hexachlorocyclopentadiene	77-47-4	< 310	ug/Kg	05/20/03		
BLANK	Hexachloroethane	67-72-1	< 470	ug/Kg	05/20/03		

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-006  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
BLANK	Indeno[1,2,3-cd]pyrene	193-39-5	< 67	ug/Kg	05/20/03			
BLANK	Isophorone	78-59-1	< 67	ug/Kg	05/20/03			
BLANK	Phenol	108-95-2	< 100	ug/Kg	05/20/03			
BLANK	Naphthalene	91-20-3	< 290	ug/Kg	05/20/03			
BLANK	Nitrobenzene-d5	Surr	4165-60-0	93.000	% Recov	05/20/03	64.000	111.000
BLANK	Nitrobenzene	98-95-3	< 260	ug/Kg	05/20/03			
BLANK	4-Nitrophenol	100-02-7	< 850	ug/Kg	05/20/03			
BLANK	4-Nitroaniline	100-01-6	< 250	ug/Kg	05/20/03			
BLANK	N-Nitroso-diphenylamine	86-30-6	< 67	ug/Kg	05/20/03			
BLANK	Pentachlorophenol	87-86-5	< 300	ug/Kg	05/20/03			
BLANK	Phenanthrene	85-01-8	< 67	ug/Kg	05/20/03			
BLANK	Phenol-d5	Surr	4165-62-2	78.000	% Recov	05/20/03	54.000	120.000
BLANK	Pyrene	129-00-0	< 67	ug/Kg	05/20/03			
BLANK	Tri-n-butylphosphate	126-73-8	< 67	ug/Kg	05/20/03			
BLANK	2,4,6-Tribromophenol	Surr	118-79-6	90.000	% Recov	05/20/03	24.000	122.000
BLANK	Terphenyl-d14	Surr	98904-43-9	96.000	% Recov	05/20/03	35.000	150.000
LCS	1,2,4-Trichlorobenzene	120-82-1	72.000	% Recov	05/20/03	48.000	107.000	
LCS	1,4-Dichlorobenzene (SV)	106-46-7	66.000	% Recov	05/20/03	42.000	111.000	
LCS	2,4-Dinitrotoluene	121-14-2	66.000	% Recov	05/20/03	58.000	106.000	
LCS	2-Fluorophenol	Surr	367-12-4	69.000	% Recov	05/20/03	50.000	110.000
LCS	Aceanaphthene	83-32-9	72.000	% Recov	05/20/03	61.000	116.000	
LCS	4-Chloro-3-methylphenol	59-50-7	78.000	% Recov	05/20/03	61.000	106.000	
LCS	2-Chlorophenol	95-57-8	74.000	% Recov	05/20/03	66.000	106.000	
LCS	N-Nitroso-di-n-propylamine	621-64-7	78.000	% Recov	05/20/03	71.000	114.000	
LCS	2-Fluorobiphenyl	Surr	321-60-8	69.000	% Recov	05/20/03	58.000	108.000
LCS	Phenol	108-95-2	76.000	% Recov	05/20/03	67.000	105.000	
LCS	Nitrobenzene-d5	Surr	4165-60-0	60.000	% Recov	05/20/03	60.000	118.000
LCS	4-Nitrophenol	100-02-7	78.000	% Recov	05/20/03	32.000	118.000	
LCS	Pentachlorophenol	87-86-5	68.000	% Recov	05/20/03	62.000	114.000	
LCS	Phenol-d5	Surr	4165-62-2	63.000	% Recov	05/20/03	59.000	116.000
LCS	Pyrene	129-00-0	59.000	% Recov	05/20/03	66.000	118.000	
LCS	2,4,6-Tribromophenol	Surr	118-79-6	72.000	% Recov	05/20/03	60.000	120.000
LCS	Terphenyl-d14	Surr	98904-43-9	78.000	% Recov	05/20/03	60.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030598  
 Matrix: SOLID  
 Test: ICP Metals Analysis, Grd H2O P

SAF Number: F03-006  
 Sample Date: 04/28/03  
 Receive Date: 04/28/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
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**Lab ID: W030000236**  
**BATCH QC ASSOCIATED WITH SAMPLE**

MS	Boron by ICP	7440-50-8	100.610	% Recov	05/28/03	75.000	125.000
MS	Bismuth by ICP	7440-69-9	96.120	% Recov	05/28/03	75.000	125.000
MSD	Boron by ICP	7440-50-8	88.490	% Recov	05/28/03	75.000	125.000
MSD	Bismuth by ICP	7440-69-9	77.600	% Recov	05/28/03	75.000	125.000

**Lab ID: W030000246**  
**BATCH QC ASSOCIATED WITH SAMPLE**

MS	Boron by ICP	7440-50-8	100.968	% Recov	05/28/03	75.000	125.000
MS	Bismuth by ICP	7440-69-9	98.780	% Recov	05/28/03	75.000	125.000
MSD	Boron by ICP	7440-50-8	88.968	% Recov	05/28/03	75.000	125.000
MSD	Bismuth by ICP	7440-69-9	81.520	% Recov	05/28/03	75.000	125.000

**Lab ID: W030000265**  
**BATCH QC ASSOCIATED WITH SAMPLE**

MS	Boron by ICP	7440-50-8	104.160	% Recov	05/28/03	75.000	125.000
MS	Bismuth by ICP	7440-69-9	95.580	% Recov	05/28/03	75.000	125.000
MSD	Boron by ICP	7440-50-8	104.560	% Recov	05/28/03	75.000	125.000
MSD	Bismuth by ICP	7440-69-9	95.720	% Recov	05/28/03	75.000	125.000
SPK-RPD	Boron by ICP	7440-50-8	0.383	RPD	05/28/03	0.000	20.000
SPK-RPD	Bismuth by ICP	7440-69-9	0.146	RPD	05/28/03	0.000	20.000

**BATCH QC**

BLANK	Boron by ICP	7440-50-8	<0.102	ug/L	05/28/03	-10.000	10.000
BLANK	Bismuth by ICP	7440-69-9	<0.1	ug/L	05/28/03	-1.000	0.068
LCS	Boron by ICP	7440-50-8	112.487	% Recov	05/28/03	62.000	84.200
LCS	Bismuth by ICP	7440-69-9	126.400	% Recov	05/28/03	80.000	120.000

**T4180-03-SLF-006**

**ATTACHMENT 3**

**SAMPLE RECEIPT INFORMATION**

Consisting of 5 pages  
Cover page not included

WASTE SAMPLING AND CHARACTERIZATION FACILITY  
P.O. BOX 1970 S3-30, Richland, WA 99352  
PHONE: (509) 373-7004/FAX: (509) 373-7134

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Ground Water Protection Program

Richland, WA 99352  
Attn: Steve Trent

Customer Code: GPP  
PO#: 117504/ES10  
Group#: 20030598  
Project#: F03-006  
Proj Mgr: STEVE TRENT A0-21  
Phone: 373-5869

*ADD* *5/4/03* *RB*  
*Resolid*

The following samples were received from you on 04/29/03. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Matrix	Sample Date
Tests Scheduled			
W030000248	B16W98	TRENT Solid, or handle as if solid @2008 @8015GPP @AEA-30 @AEA-31 @AEA-32 @GEA-GPP @IC-30 @ICP-GPP @LABSCRN @PCBGPP @SVOC @TPHD-WA @TPHG-WA @VOA-GPP CN-02 NH4-IC PERSO PH-30	04/29/03
W030000246	B16W96	TRENT Solid, or handle as if solid @2008 @8015GPP @AEA-30 @AEA-31 @AEA-32 @GEA-GPP @IC-30 @ICP-GPP @LABSCRN @PCBGPP @SVOC @TPHD-WA @TPHG-WA @VOA-GPP CN-02 NH4-IC PERSO PH-30	04/29/03
W030000247	B16W97	TRENT Solid, or handle as if solid @2008 @8015GPP @AEA-30 @AEA-31 @AEA-32 @GEA-GPP @IC-30 @ICP-GPP @LABSCRN @PCBGPP @SVOC @TPHD-WA @TPHG-WA @VOA-GPP CN-02 NH4-IC PERSO PH-30	04/29/03

Test Acronym Description

Test Acronym	Description
@2008	ICP-2008 MS All possible metal
@8015GPP	Alcohols, Glycols - 8015
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@IC-30	Anions by Ion Chromatography
@ICP-GPP	ICP Metals Analysis, Grd H2O P
@LABSCRN	Sample Screen - LAB USE ONLY
@PCBGPP	PCBs complete list
@SVOCGPP	SW-846 8270B Semi-Vols
@TPHD-WA	WTPH-D TPH Diesel Range (Wa)
@TPHG-WA	NWTPH-GX TPH Gasoline Range
@VOA-GPP	VOA Ground Water Protection

Ground Water Protection Program

Richland, WA 99352  
Attn: Steve Trent

Customer Code: GPP  
PO#: 117504/ES10  
Group#: 20030598  
Project#: F03-006  
Proj Mgr: STEVE TRENT A0-21  
Phone: 373-5869

Test Acronym Description

Test Acronym	Description
CN-02	Cyanide by Midi/Spectrophotom
NH4-IC	Ammonia (N) by IC
PERSOLID	Percent Solids
PH-30	pH Soil and Waste Measurement

FH-Central Plateau Project		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						F03-006-79	Page 1 of 1		
Collector Johansen/Pope/Pfister		Company Contact LC Hulstrom			Telephone No. 373-3928		Project Coordinator TRENT, SJ		Price Code <b>8N</b>	Data Turnaround <b>30 Days</b>	
Project Designation 200-PW-2/200-PW-4 OU - Borehole Soil Sampling		Sampling Location 216-A-37 (C4106); (27.5-30)					SAF No. F03-006				
Ice Chest No. <i>EPL-01-01</i>		Field Logbook No. HNF-N-3361		COA 117504ES10		Method of Shipment Government Vehicle					
Shipped To Waste Sampling & Characterization		Offsite Property No. N/A				Bill of Lading/Air Bill No. N/A					
POSSIBLE SAMPLE HAZARDS/REMARKS  Special Handling and/or Storage  <i>20030598</i>			Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C				
			Type of Container	Gs*	aG	Gs*	P				
			No. of Container(s)	3	1	3	1				
			Volume	40mL	250mL	40mL	500mL				
SAMPLE ANALYSIS				See item (1) in Special Instructions.	See item (2) in Special Instructions.	See item (3) in Special Instructions.	See item (4) in Special Instructions.				
Sample No.	Matrix *	Sample Date	Sample Time								
B16W96	SOIL	<i>1/29/02</i>	<i>0745</i>	X	X	X	X				
		<i>W030598</i>									
CHAIN OF POSSESSION				Sign/Print Names					SPECIAL INSTRUCTIONS		
Relinquished By/Removed From <i>Johansen/Pope/Pfister 4/29/03 1125</i>	Date/Time	Received By/Stored In <i>Victor Bns 4/29/03 1125</i>	Date/Time	** The laboratory is to report both kerosene and diesel range compounds from WTPH-D analysis.					Matrix *		
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time	(1) VOA - 8260A (TCL); VOA - 8260A (Add-On) {2-Pentanone, Benzyl alcohol, n-Butylbenzene} (2) Semi-VOA - 8270A (TCL); Semi-VOA - 8270A (Add-On) {2-Butoxyethanol, Tributyl phosphate}; TPH-Diesel Range - WTPH-D; TPH-Gasoline Range - WTPH-G; PCBs - 8082 (3) Alcohols, Glycols, & Ketones - 8015 {1-Butanol, Diethyl ether, Ethylene glycol, Methanol} (4) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Antimony-125, Cesium-134, Radium-226, Radium-228, Tin-126}; Isotopic Plutonium; Americium-241; Isotopic Uranium; Trace Elements ICP/MS - 200.8 (Complete) {Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Uranium}; ICP Metals - 6010A (Add-on) {Bismuth, Boron}; IC Anions - 300.0 (Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate}; Cyanide (Total) - 335.2; Cations (IC) - 300.7 {Nitrogen in ammonium}; pH (Soil) - 9045					S=Soil SE=Sediment SO=Solid SI=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other		
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
LABORATORY SECTION	Title								Date/Time		
FINAL SAMPLE DISPOSITION	Disposed By								Date/Time		

FH-Central Plateau Project		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						F03-006-80	Page 1 of 1		
Collector Johansen/Pope/Pfister		Company Contact LC Hulstrom			Telephone No. 373-3928		Project Coordinator TRENT, SJ		Price Code 8N	Data Turnaround 30 Days	
Project Designation 200-PW-2/200-PW-4 OU - Borehole Soil Sampling		Sampling Location 216-A-37 (C4106); (37.5-40°)					SAF No. F03-006				
Ice Chest No. <i>(ERL-01-01)</i>		Field Logbook No. HNF-N-3361		COA 117504ES10		Method of Shipment Government Vehicle					
Shipped To Waste Sampling & Characterization		Offsite Property No. N/A				Bill of Lading/Air Bill No. N/A					
POSSIBLE SAMPLE HAZARDS/REMARKS  Special Handling and/or Storage		Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C					
		Type of Container	Gs*	#G	Gs*	P					
		No. of Container(s)	3	1	3	1					
		Volume	40mL	250mL	40mL	500mL					
SAMPLE ANALYSIS				See item (1) in Special Instructions.	See item (2) in Special Instructions.	See item (3) in Special Instructions.	See item (4) in Special Instructions.				
Sample No.	Matrix *	Sample Date	Sample Time								
B16W97	SOIL	<i>4/29/03</i>	<i>0900</i>	X	X	X	X				
<i>(18030000247)</i>											
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS			
Relinquished By/Removed From <i>Johansen/Pope/Pfister</i>	Date/Time <i>1125 4/29/03</i>	Received By/Stored In <i>Victor Bins</i>	Date/Time <i>1125 4/29/03</i>	The laboratory is to report both kerosene and diesel range compounds from WTPH-D analysis.				Matrix *			
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time	(1) VOA - 8260A (TCL); VOA - 8260A (Add-On) {2-Pentanone, Benzyl alcohol, n-Butylbenzene}; (2) Semi-VOA - 8270A (TCL); Semi-VOA - 8270A (Add-On) {2-Butoxyethanol, Tributyl phosphate}; TPH-Diesel Range - WTPH-D; TPH-Gasoline Range - WTPH-G; PCBs - 8082 (3) Alcohols, Glycols, & Ketones - 8015 {1-Butanol, Diethyl ether, Ethylene glycol, Methanol} (4) Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Antimony-125, Cesium-134, Radium-226, Radium-228, Tin-126}; Isotopic Plutonium; Americium-241; Isotopic Uranium; Trace Elements ICP/MS - 200.8 (Complete) {Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Uranium}; ICP Metals - 6010A (Add-on) {Bismuth, Boron}; IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate}; Cyanide (Total) - 335.2; Cations (IC) - 300.7 {Nitrogen in ammonium}; pH (Soil) - 9045				S=Soil SE=Sediment SO=Soil SI=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other			
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								
LABORATORY SECTION	Received By						Title		Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method						Disposed By		Date/Time		

<b>FH-Central Plateau Project</b>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>						<b>F03-006-81</b>	Page 1 of 1			
Collector Johansen/Pope/Pfister		Company Contact LC Hulstrom			Telephone No. 373-3928		Project Coordinator TRENT, SJ		Price Code <b>8N</b>	Data Turnaround <b>30 Days</b>		
Project Designation 200-PW-2/200-PW-4 OU - Borehole Soil Sampling		Sampling Location 216-A-37 (C4106); (47.5-50°)					SAF No. F03-006					
Ice Chest No.		Field Logbook No. HNF-N-3361		COA 117504ES10		Method of Shipment Government Vehicle						
Shipped To Waste Sampling & Characterization		Offsite Property No. N/A				Bill of Lading/Air Bill No. N/A						
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b>  <b>Special Handling and/or Storage</b>				<b>Preservation</b>	Cool 4C	Cool 4C	Cool 4C	Cool 4C				
				<b>Type of Container</b>	Gs*	aG	Gs*	P				
				<b>No. of Container(s)</b>	3	1	3	1				
				<b>Volume</b>	40mL	250mL	40mL	500mL				
<b>SAMPLE ANALYSIS</b>				See item (1) in Special Instructions.	See item (2) in Special Instructions.	See item (3) in Special Instructions.	See item (4) in Special Instructions.					
Sample No.	Matrix *	Sample Date	Sample Time									
B16W98	SOIL	4/29/03	1020	X	X	X	X					
W030002248												
<b>CHAIN OF POSSESSION</b>				<b>Sign/Print Names</b>				<b>SPECIAL INSTRUCTIONS</b>				
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time	** The laboratory is to report both kerosene and diesel range compounds from WTPH-D analysis.				Matrix *  S=Soil SE=Sediment SO=Solid SI=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other				
Johansen/Pope/Pfister	4/29/03 1125	Victor Bane	4/29/03 1125	(1) VOA - 8260A (TCL); VOA - 8260A (Add-On) {2-Pentanone, Benzyl alcohol, n-Butylbenzene}								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time	(2) Semi-VOA - 8270A (TCL); Semi-VOA - 8270A (Add-On) {2-Butoxyethanol, Tributyl phosphate}; TPH-Diesel Range - WTPH-D; TPH-Gasoline Range - WTPH-G; PCBs - 8082								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time	(3) Alcohols, Glycols, & Ketones - 8015 {1-Butanol, Diethyl ether, Ethylene glycol, Methanol}								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time	(4) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Antimony-125, Cesium-134, Radium-226, Radium-228, Tin-126}; Isotopic Plutonium; Americium-241; Isotopic Uranium; Trace Elements ICP/MS - 200.8 (Complete) {Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Uranium}; ICP Metals - 6010A (Add-on) {Bismuth, Boron}; IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate}; Cyanide (Total) - 335.2; Cations (IC) - 300.7 {Nitrogen in ammonium}; pH (Soil) - 9045								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
LABORATORY SECTION	Received By _____ Title _____				Date/Time _____							
FINAL SAMPLE DISPOSITION	Disposal Method _____				Disposed By _____				Date/Time _____			

Fluor Hanford  
P. O. Box 1000  
Richland, WA 99352

**FLUOR**

**Memorandum**

T4180-SLF-03-022

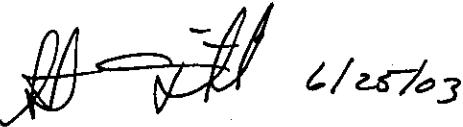
To:	S. Trent	A0-21	Date:	June 27, 2003
From:	S. L. Fitzgerald	S3-30	Telephone:	373-7495
cc:	T. F. Dale M. Neely LB/ File	S3-28 S3-30		
Subject:	BORON CONTROL LIMITS CORRECTION			

WSCF recently discovered an error in the control limits established in our LIMS database for your project. The analysis in question was Boron by ICP for the solid matrix. The original limits were 52.0 to 84.2%. They have now been corrected to 80 to 120 %. No actual standard recoveries were impacted by this change. The limits in our LIMS database have been updated for all data previously released to your program as well. The following sample delivery groups were updated: 20030459, 20030460, 20030461, 20030470, 20030492, 20030515, 20030524, 20030588, 20030598 and 20030613. This memo provides notice of the change in these batches. The hard copy of these reports will not be reissued.

For your information, a copy of the problem report addressing this issue is attached.

dtb

**PROBLEM REPORT**

<b>Initiator/Date</b>	<b>Problem Report Number</b>
Scot Fitzgerald, 6/18/03	2003-005
<b>Problem (Including violated requirements)</b> The @ICP-GPP Boron LCS percent recovery control limits were incorrect (52.0 to 84.2%). Several data reports were issued with the incorrect control limits.	
<b>Probable Cause:</b> The chemist submitted the Boron STD recovery range as a concentration rather than a percent range. The LIMS administrator entered the concentration values as percent recovery values.	
<b>Samples Affected:</b>  The actual LCS recoveries were not effected.	<b>Client Notification Required?</b>  Yes (Completed)
<b>Corrective Action Plan (Including schedule for completion)</b> 1. Correct LCS recovery limits in LABCORE and in the LABCORE QC History table (Completed on 6/13/03) 2. Per customer agreement, issue memo outlining the control limit change and listing the effected sample delivery groups (Estimated completion 6/26/03)	
<b>Affected Records Corrected?</b>  (logbook, worksheet, etc.) LABCORE corrected.	<b>Corrected Report Issued?</b>  Per customer agreement, a memo will be issued outlining the corrections.
<b>Manager or Team Leader Concurs (Signature / date)</b>   6/25/03	<b>QA Coordinator Concurs (Signature / date)</b>   6/25/03
<b>Progress Report - attach additional pages if necessary</b>	
<b>Completion (Manager or team leader signature/ date)</b>	<b>PR Closure (QA Coordinator signature date)</b>